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A LECTURE

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How to Cultivate the Memory.

Ladies and Gentlemen: A year ago we studied together the nature of the memory, its mode of origin, and the laws which govern its operation. I promised upon that occasion that I would speak to you concerning the method of strengthening that important function; and to-night I shall be pleased to tell you what I know upon this subject. You must not expect that you will be led into the realms of magic, even if it be only natural magic, and that I shall reveal a secret charm whereby in an instant a perfect memory will be produced. Just as little as you would give credence to a charlatan who would make an athlete of you in a lesson, just so little must you expect to be made a mental athlete in an hour. There is a law pervading all the organic world regulating the functions of all living cells, which operates upon those of the brain, as well as upon those of the muscles; and in accordance therewith all function must be gradually acquired. All that I can do for you is to point out the way, to show you the method whereby latent powers may be developed. I can show you how to make your brains act, but you must set them in operation for yourselves. I can point out to you the dangers you are to avoid, the improper actions of the mind that pervert rather than strengthen the memory; I can show you the errors of many artificial methods of memory training; but the physiological method is one requiring perseverance and long effort.

But, before we speak of the methods of training the memory, let us see whether it is really a good thing to have an excellent memory. We have all heard it said that developed memories and good judgment do not necessarily go hand in hand—that those who have the best memories for detail are not the great philosophic minds, but rather undeveloped brains. We observe that young children are usually endowed with most retentive memories, which gradually lose their power with advancing age, and with the development of reason and general brain power; and the natural inference is that the development of the reason is the cause of the loss of memory power, and that these two faculties are in a measure antagonistic to each other. Indeed, we are apt to be strengthened in this feeling when we learn that many idiots possess most wonderful memories. Canon Fearon mentions a man living in his father's parish who could remember the day of burial of every person that had died in the parish for 35 years; and could repeat with unvarying accuracy the name and age of the deceased and the mourners at the funeral. But out of the line of funerals he had not one idea, could not give an intelligent reply to a single question, nor be trusted to feed himself. An idiot is described by Mrs. Somerville who could repeat verbatim a sermon he had heard, indicating also where the minister blew his nose or coughed during the performance. These facts show us that memory is not all there is to mind, but by no means that it stands in the way of a high order of intelligence. In fact just the contrary is true. It is the memory which calls forth from their hidden places the past acquisitions of the mind and makes them available for use.

Nearly all great minds have been endowed with phenomenal memories. What must have been the powers of recollection of Shakespeare, who seems to have had all knowledge at his fingers' ends? Prof. Scott says: "Memory, far from being incompatible with genius, seems even to be necessary to its utmost perfection, for those happy exertions of intellect which confer immortality upon their authors. If we look around us at those individuals who have acquired eminence as men of genius, or examine into the endowments of those who have formerly been famed for their intellectual exertions, we shall uniformly find that a retentive and capacious memory was the basis upon which their literary fame was reared." "The man of genius," remarks Helvetius, "sometimes appears to want memory only from the too confined signification given to the word memory in restraining it to the remembrance of names, dates, persons and places for which the man of genius has no curiosity, and often finds that here his memory fails him. But comprehending in the signification of this word the remembrance of ideas, images and reasonings, none of them is deficient. There is no such thing as genius without memory." Prof. James says: "Men of the highest general powers will often forget nothing however insignificant. One of the most generally accomplished men I know, has a memory of this sort. He never keeps written notes of anything, yet is never at a loss for a fact which he has once heard. He says that he should probably recognize an individual fly if he had seen him thirty years previous; he is, by the way, an entomologist. As an instance of his desultory memory, he was introduced to a certain Colonel at a club. The conversation fell upon the signs of age in a man. The Colonel challenged him to estimate his age. He looked at him and gave the exact day of his birth, to the wonder of all. But the secret of his accuracy was, that having picked up some days previously an army register, he had idly turned over its list of names, with dates of birth, promotions, etc., attached; and when the Colonel's name was mentioned to him at the club, those figures on which he had not bestowed a moment's thought, involuntary surged up in his mind. Such a memory is, of course, a priceless boon."

In order that the mind should be able to utilize its past experiences, it is necessary that it be able to bring them within the field of operation, and that field is consciousness. It is by the aid of memory that these previous acts of the mind are drawn from their hiding places, and become objects of mental activity. The more the mind is able to make the past present, the greater, other things being equal, will be its scope. But, as was remarked before, memory alone will not make mind, any more than grain alone is flour. We need the mill to grind it before it can be utilized as food. So the materials supplied by memory must be worked over in the mind before they can lead to mental progress. We know that just as all men are not equal in muscular power, so they vary in scope of memory. "In some," observes John Locke, "the mind retains the characters drawn upon it like marble, in others like freestone, and in others little better than sand."

Among the ancients memory was held in high repute, and numerous instances have been handed down to us, showing how wonderful were the powers of recollection of the celebrities of old. It is said of Cyrus that he knew the name of every soldier in his army. Otho, the Roman emperor, owed in a great measure his crown to his prodigious memory. He had learned the name of every soldier of his army while a simple officer, and used to call every one by his proper name. The soldiers, flattered by what they thought a mark of sympathy, persuaded themselves that if he were elevated to the supreme power, such an emperor could not forget in his favors those whose names he so well remembered. They all declared for him, and enabled him to overthrow his rival. Cicero relates that Hortensius, the Roman orator, and his own contemporary, "had such an excellent memory that whatever he had composed in private he could repeat without notes in the very words he had at first employed." He used this power of recollection with such facility that he remembered, without any reference, not only what he had premeditated or written, but also everything that had been said by his opponent. As a proof of his marvellous strength of memory, Hortensius once attended for a whole day a public sale, and at its close repeated with exactness, in regular order, the names of the articles sold, and the prices realized. "That celebrated and accomplished scholar of the fifteenth century, Joseph Scaliger, committed to memory, in the short space of 21 days, the whole of Homer's Iliad, and Odyssey in Greek. He also learned by heart, in three months, all of the Greek poets." Muretus relates that in the year 1581, there lived at Padua a young Corsican law student, who possessed a most extraordinary memory. To put his powers to the test, Muretus invited the young man to his home, where a large party of guests were assembled to witness the proceedings. He dictated to the student a number of words in various languages, until he wearied himself and his friends. The Corsican alone was not tired, but continually asked for more words. Muretus declared that he should be more than satisfied if the young man could repeat half the words that had been dictated. The student, fixing his eyes on the ground for a short time, began to repeat, without the slightest hesitation, the whole list of words that had been dictated, in the same order in which they had been named. He then commenced with the last word, and repeated the list backwards to the first. When he had accomplished this marvellous feat, he named the words alternately without the slightest mistake.

Richard Porson, professor in the University of Cambridge, was distinguished alike for his learning and his memory. When a lad at Eton, as he was going to his Latin lessons one day, he had his Horace exchanged for an English book by one of the boys, who wished to play him a trick. Porson, however, who had learned Horace by heart before he went to Eton, was nothing disconcerted by the trick which had been played upon him; but when called upon to recite, opened the English book in his hand, and without hesitation began to construe the Latin. The tutor, perceiving some signs of astonishment as well as mirth among the boys, and suspecting that there was something uncommon in the affair, asked Porson what edition of Horace he had in his hand. "I learned the lesson from the Delphian edition," replied the pupil, avoiding a direct answer. "That is very odd," rejoined the master, "for you seem to be reading a different page from myself. Let me see your book." The truth of course came out, and the master said that he should be most happy to find any other of the boys acquitting themselves as well under similar circumstances. Dr. Abernethy had a remarkable retentive memory. One day he invited a party of friends to do honor to his wife's birthday, when one of the guests, being of a poetical turn of mind, recited some verses he had composed complimentary to Mrs. Abernethy. The doctor listened attentively to the reading of them, and then exclaimed: "Come, that is a good joke, passing off those verses as your own composition. I know them by heart." All were mute with astonishment, while Abernethy recited the verses without a single error. The poet was amazed, mystified, angry. The amused host explained, and offered to repeat any piece of the same length that any of the company would recite. It is related of the great Pascal that until the decay of his health had impaired his memory, he forgot nothing of what he had done, read, or thought, in any part of his rational age. These phenomenal memories were usually of spontaneous growth, just as great physical strength is a natural gift; but it is probable that in most cases they were developed to a higher point than that to which they would otherwise have attained by a painstaking and more or less judicious training.

The use of any faculty of the mind stimulates its growth and strengthens its development. Among the Greeks and Romans mnemotechnic methods were very extensively taught, and much attention was paid to the mode of development of the memory. If we may judge by the writings that have been handed down to us, the cultivation of the memory with them was produced by what has been termed the method of localization, or association to place. It was a favorite plan to form a picture of a room, and in this room to form a clear picture of the walls, the furniture, etc., and so to fix it in mind that thought could instantly revert to it. The fact or thing to be remembered was then symbolized, and the symbol was placed in fancy in or on the appropriate part of the room. The instant that the object of furniture was called to mind, the symbol would present itself and the thing to be remembered would be recalled. Different rooms in the same house were utilized to serve as receptacles for symbols of an allied character, and numerous houses were joined together into mnemonic towns. This same method is still employed by teachers of mnemonics, and has been somewhat modified so as to make it more easy of application. The present plan is to picture each room divided into numbered squares. These squares are arranged in three rows of three each on the floors, walls, and ceilings; the units, tens, twenties, and thirties being on the four walls; the forties on the floor, and the numbers 10, 20, 30, and 40 on the ceiling adjoining the preceding numbers. In the centre of the ceiling 50 is placed. After the student has fixed these decorated rooms in his mind, he, in imagination, places the symbol of that which he desires to remember in its appropriate place; and having fixed these positions well in his mind, he is able to recall the facts in any order he pleases without difficulty. The great objection to this method of memorizing is, that a highly developed visualizing imagination is necessary to its use, and that it can be employed successfully only in those cases in which the appropriate symbol can be readily pictorially represented.

During the eighth century the Masorites undertook to make an accurate inventory of the Bible, counting its chapters, verses, and letters. In order to aid the memory they represented these numbers by means of a familiar sentence taken at random from some portion of the Bible, the numerical value of the consonants in each such sentence indicating the number to be remembered. An entire sentence was not usually required for this purpose, and only those words necessary to express the numbers were printed in large type, the rest of the sentence being printed smaller. These sentences may still be found printed at the end of each book of the Hebrew Bible. This method of fixing numbers in the mind has since been utilized in various modifications by teachers of mnemonics, and is really of service where a numerical memory cannot be otherwise acquired. It is probable that this method was that which suggested that of Winkleman, who, in the seventeenth century, published a system of memorizing numbers by the use of letters.

Richard Grey, a follower of Winkelman, in 1730, taught that to remember any date in history, chronology, etc., a word is formed, the beginning of which is the first syllable of the thing sought, and the latter portion containing the letters which represent the figure to be remembered. Thus, if he desired to indicate the date of the deluge, 2348 years before Christ, he formed the word "Deletok," "Del" naturally standing for deluge, and "etok" being translated into 2348. In order to remember these fantastic words they were formed into memorial verses. The vowels and consonants which Grey selected to represent the individual figures were chosen at random; but in 1806 Feinaigle, a monk of Salem, near Constance, arranged a system in which the letters were chosen to represent each number on account of some similarity to the figure represented, or some accidental connection with it. In this system only the consonants have numerical values. "Z" is represented by "s," both the upper and lower half of which letter resembles "o." "C soft," and "z" are used for the same purpose. There being one stroke in "t," it stands for the figure one; and its cognates "d" and "th" are likewise the representatives of one. "N" being made of two strokes, and "m" of three, they stand for two and three respectively. As in several languages "r" terminates the word for four, that letter is selected to represent that number. As the Roman letter "l" stood for fifty, "l" is made to represent five. For the number six, "j" is selected, with its cognates "sh," "ch soft," and "g soft;" whereas, "g hard," "k," "c hard," "p," and "ng" stand for seven. As the small written "f" resembles an elongated 8, it and its cognate "v" are used to designate that number; while "b," being of the form of an inverted 9, it and "p" indicate nine. In order to convert a number into letters by this system, the appropriate consonants chosen from this set are united by vowels selected at will so as to form a word or phrase. Thus, by this system the date of the Deluge could be translated by the phrase, "Noah may arrive," "n" being 2, "m" 3, "r" 4, and "v" 8.

A method has lately been introduced which has received a great deal of prominence, and which, in some cases, will be found of service in remembering. It may be called the "Method of Association." According to this system, connecting links are formed between the two thoughts to be associated, so that each link being readily recalled by the preceding word, and suggesting that which is to follow, the two thoughts are readily united. In this system, if it were desired to remember that gravity is the cause of weight, the association could be produced by the words gravity, grave, heavy, weight. The objection to this method, and a very vital one, is that the connecting words do not necessarily call up only one set of links, but may recall several, and so lead to confusion. In some instances, however, it may be of service. It may be united to the numerical method, and so assist in the recollection of figures. The date of the Deluge would be thus: Deluge, ark, Noah, Noah may arrive, the last phrase standing for the figures 2348.

All of these methods will be found to be of value in tricks of memory, such as will enable one to readily recall any number of words, but are certainly of very little use in the development of the unassisted memory. One author says: "The systems of mnemonics as taught are no better than crutches, useful to those who cannot walk, but impediments and hindrances to those who have the use of their limbs, and who require only to exercise them properly to have full use of them." It seems to me that their chief merit lies in the habit which their practice induces of fixing the mind intently upon the facts to be remembered.

The natural method whereby a memory is formed is very different from any which has thus far been referred to. It lies in use. We know that every faculty of the body or of the mind can be strengthened by proper management, and this observation applies also to the memory. As we learned at a former lecture, memory is simply a reproduction of a former state of the mind, with the knowledge of the fact that that state had previously existed. The first and important step in the cultivation of the memory must therefore be a strong effect upon the mind. You will remember that our ideas were shown to be mainly visual pictures, aural pictures, motor pictures, or non-pictorial thoughts. The first thing to be done in the cultivation of memory is to strengthen the intensity of these representations. If an individual have visual imagery, readily representing pictures to his mind, he should develop this power to its utmost degree. In order to determine whether or not you have this faculty look at a scene, shut your eyes, and think about it. If you are a visualizer, that which you have looked at will persist in the mind as a clear picture. This faculty may be cultivated by practice so that the mental picture will become an exact fac-simile of that seen. I have been engaged upon a series of experiments for the purpose of determining whether this power could be artificially strengthened in those having it to a slight degree, or evoked in those who had not possessed it before; and I believe that such a method can be found. You will remember that in my last lecture I told you that persons who have been resuscitated from drowning, have related that while submerged they had clear pictorial representations of their past lives. During the period of submergence the individuals were unable to breathe, and it is my opinion that the carbonic acid gas, which formed in the blood, stimulated the visual centres, and gave rise to the pictures. Acting upon this idea, I have suggested the holding of the breath while practising mental imagery, and the result has been a surprising development of that faculty. By this method, or by simple assiduous practice, the mental pictures, which before had been pale and cloudy, will become bright and clearly defined. Similarly by practice, aural and motor pictures and concept representations will become clear and sharp.

In order, however, that any idea should become fixed in the mind, it is necessary that the attention should be concentrated upon it. You all know that when the attention is not directed to an occurrence, we are absolutely unconscious of it. Instances of this fact are too common in our daily lives to require any illustration. The more the mind is directed to a matter in hand, the greater will be the impression made. A bright friend of mine is in the habit of telling his students that when they look at a thing, to look as if their lives depended on knowing all about it, and as if it would vanish from sight after having been seen. This simply means that they should attend to all its details and to exclude all other thoughts from their minds. Such concentration of the attention upon the matter in hand provides for a deep impression being made upon the brain, which, other things being equal, will be more lasting than a faint impress. In order that a mental state should become more or less permanently fixed in the memory, it is necessary that the thought should be clear cut and well defined, and that it be present in the mind for a sufficient length of time. Fleeting thoughts are never well remembered. Porter says: "To remember anything you must attend to it; and in order to attend to it, you must either find or create an interest in the object to be attended to. The interest must, if possible, be felt in the objects themselves, as directly related to your own wishes, feelings and purposes, and not to some remote end on account of which you wish to make the acquisition." The late Sir Thomas Burton advised his son in the following golden words: "What you know, know thoroughly. There are few instances in modern times of a rise equal to that of Sir Edward Sugden. After one of the Waymouth elections, I was shut up with him in a carriage for 24 hours. I ventured to ask him what was the secret of his success. His answer was: 'I resolved when I began to read law to make everything I acquired perfectly my own, and never to go to a second thing till I had thoroughly mastered the first. Many of my competitors read as much in a day as I read in a week, but at the end of twelve months my knowledge was as fresh as on the day it was acquired, while their's had glided away from their recollection.' "

But, in addition to the faculty of preserving thoughts in the mind, memory requires the ability to recall them at any time. We know that all of our thoughts are linked together by chains which may be readily discovered, or which may escape our observation. Psychology teaches us that no thoughts ever arise except they be called into existence either by other thoughts or by sensations. This being the case, the greater the number of other thoughts with which that to be remembered enters into relations, the greater will be the facility with which it will be recalled. This law is called "the law of association of ideas." In order, then, that a thought be well remembered, it should enter into relations with as many and as firmly rooted thoughts as possible. It is on this account that we best remember facts relating to our ordinary pursuits. Legal facts will be most readily remembered by the lawyer, medical facts by the physician. How easily does a lady remember the number and succession of the stitches in a piece of embroidery she sees, and how difficult would be the recollection of the same for a masculine mind! It is wise, therefore, in attempting to record facts to think of them in connection with others of a similar nature. In other words, the more intense and the more generalized the thought has become, the more available is it for the purposes of memory. If we consider what are the things which we remember with the greatest tenacity we will find them to be those which were associated with the most intense emotions, those in which our interest was most aroused. Interest is that which graves the thought deepest into the mind. Would we remember well, then, it is wise to arouse an interest either natural or artificial, in the matter in hand.

It may be difficult for one unused to habits of study to cultivate this faculty of attention, but without it memory becomes impossible. The lack of this power gives rise to what is termed mind wandering. The power of focalizing one's energies on one idea to the exclusion of other thoughts which strive to invade the field of thought is a most valuable one, and is absolutely necessary to the highest cultivation of the mind. It is a power which can readily be strengthened by proper management, and it might be well to suggest to such of you as desire to correct mind wandering a simple method which I have recommended. In the Delsarte system of gesticulation it is taught that the first thing to be learned is to make all of the muscles of the body absolutely lax; and this task is by no means easy for one unskilled in the art. So in the mental training the first thing to be done is to learn to put the mind absolutely at rest. For this purpose sit in a quiet room and make the mind a complete blank, and keep it so for five minutes, more or less. This first lesson in mind training is difficult to many, especially to those affected with mind wandering, but will be found to be most valuable.

When the power of making and keeping the mind in this negative condition has been acquired, the next step is to hold a single thought clear and sharp, and unmixed with other thoughts. I would suggest for this purpose to look at an object in the room, close the eyes and keep that picture as vividly before the mind as possible. When the faculty of accomplishing this in a quiet room has been attained, the same exercise might be performed in a noisy place, in which the sounds produced are not such as specially interest the experimenter, as for example on a car. The final step in this course of mental training is to keep the pictures clear and distinct from all other thoughts in a room in which a conversation is going on in which one is interested. Such a system of thought training will in a short time cure the worst form of mind wandering.

The method of cultivating the memory proper is similar to that employed in the strengthening of the muscles; and here we can learn a lesson from the so-called "trainers." With the athletes it is a rule never to strain the muscles that are to be developed; never to make the task to be performed greater than can be accomplished with ease. So in the cultivation of the memory the tasks imposed should not be greater than can be performed with ease and pleasure. Let us assume that the memory for what is read is to be cultivated. Let the pupil commit to memory one or two lines a day, and fix them in the mind by daily reviews from memory, and let that number of lines be memorized each day with review of those previously learned. After a short time he will find his task easy, and he may safely increase the number until after a while he will find that his memory has developed so that a much greater number can be learned and retained. But the secret of success lies in the constant review. In other words, the way to learn to remember is to remember. We are reminded of the farmer whose son asked him how to learn to chop. His reply was, "Take an axe and chop." It is certainly a most valuable faculty to be able to read a book and to remember what it contains. If the reading be done, as it usually is, in a slip-shod fashion, this will be difficult. The task will be lightened if the reader cultivate the habit of reviewing mentally what he has read, after each paragraph, each page and each chapter. In this manner a clear conception will be formed in his mind, and by occasionally recalling what he has acquired it will become a permanent part of his mental stock.

This will more especially be the case if the new thoughts find similar thoughts already present in the mind, with which they may become amalgamated. It is by calling these thoughts into consciousness again that the facility for their recall becomes enhanced. Review and re-review is the secret of successful memory culture. It matters not what the nature of the memory to be cultivated may be, the method is the same for every form. If we carefully examine our mental functions we will find that each of us is most lacking in some special direction: one may remember faces badly, another dates, another sounds, etc. If it be desirable to develop the special form which is defective, the method just described will, with perseverance, lead to the desired result. Probably no one has the perfect memory which Weir Mitchell describes in the February number of the *Century*. The unfortunate possessor of this marvellous memory was rendered truly miserable by the vividness of his recollections. Every occurrence of his life recurred to his mind with all the attendant emotions and sufferings, as acute as when they were first experienced. No wonder the poor victim of perfect recollection longed for rest in the grave. Such absolute memory probably exists only in the imagination of the poet, and we may well run the risk of incurring a like danger. A trouble that besets most of us in the exercise of the memory, is distrust of its power.

In all bodily acts lack of confidence produces lack of skill. All know how readily one is disturbed in games by the feeling of insecurity; how easily balking disconcerts. In nothing is this deleterious effect of lack of self-reliance more evident than with the memory. "If," says Hartley, "the desire to recollect a thing which has escaped us be great, it changes the state of the brain and has an opposite effect, so that the desired idea does not recur till all has subsided; perhaps not even then." "The first mistrust of memory," remarks Sir Henry Holland, "leads many persons to tax it in the way of trial. They persist in harrassing efforts to recover a word, a name, or a number, whereas, the labor of the attempt is in itself the cause of present failure and of future mischief if often repeated. The apprehension of inability creates it, and one failure begets another." In quaint old style says Thomas Fuller: "Spoil not thy memory with thine own jealousy, nor make it bad by suspecting it. How canst thou find that true which thou wilst not trust?"

Our memories are of two forms: (1) Spontaneous memory, in which the thought recurs to the mind without the slightest effort. (2) Intentional memory where an effort must be made by the mind to recall the thought. Spontaneous memory is inborn and not the result of training; whereas, in the intentional form the active element is prominent—is diminished by lack of use and strengthened by effort. When we attempt to recall a thought or a thing there arises first, a faint conception of it in the mind, which becomes intensified by the conscious mental effort. We often can succeed in the act of memory by thinking of something which suggests the object sought. Probably all of you have resorted to the trick of running over the alphabet in your minds when trying to recall a name, the initial letter suggesting the whole name.

The cultivation of the memory may be well compared to the cultivation of the power of the muscles. Just as there are certain individuals who have naturally strong muscles, and who are capable of Herculean feats, even without any special training, so there are peculiarly gifted people whose memories are phenomenal. This extraordinary development of the memory need not go hand in hand with any special development of the thinking powers, for thinking consists in something more than memory. Memory is but one of the tools of the mind—an important one truly, but by no means the only one employed! Memory is that whereby past experiences and thoughts are presented to the mind, and which supplies the brain with the material wherewith it operates. In thinking, these past experiences are combined and arranged and deductions drawn from them. The process of thought may be compared to chemical activity—memory supplying the material, and just as in chemical action, the resultant substances may differ from each of those which enter into its formation—so in the process of thought, the resultant thought may be entirely a new one.

To review what has been learned in the preceding lecture, memory, like any other bodily or mental faculty is in part inherited, and in part acquired. The latter factor can be readily increased by judicious training. Such training consists in the acquisition of intense mental impressions: (1) Through the development of the powers of visual and aural imagery. (2) Through the habit of concentration of the attention with greatest possible tension upon the matter in hand. (3) By the habit of associating the new thought with those already forming a part of the mentality of the individual. In other words, the systematic arrangement of the newly acquired ideas. This is the thought element in memory. (4) The habit of frequently recalling to the mind those ideas which it is deemed advisable clearly to remember, and to have so completely under command that their recollection shall become automatic. (5) The cultivation of a feeling of self-reliance and trust of the power of memory. (6) The use of the memory systems, described early in the lecture, for the purpose of recollecting disjointed facts, or such as bear no relations to previous knowledge.

These helps are, as a rule, to be discouraged, for, although of service in certain cases, they tend rather to weaken than to strengthen the natural memory, except to the extent that they cultivate the habit of permitting the mind to dwell upon that to be remembered. Finally, we should take the advice of Coleridge, for not only will it aid our powers of recollection, but it will also add to our general usefulness and happiness, when he gives as the requisites of a good memory: sound logic, a healthy digestion, and a quiet conscience.

A CLINICAL LECTURE

Delivered at the City and County Hospital, San Francisco, Cal.,

By **Albert Abrams, M. D.,**

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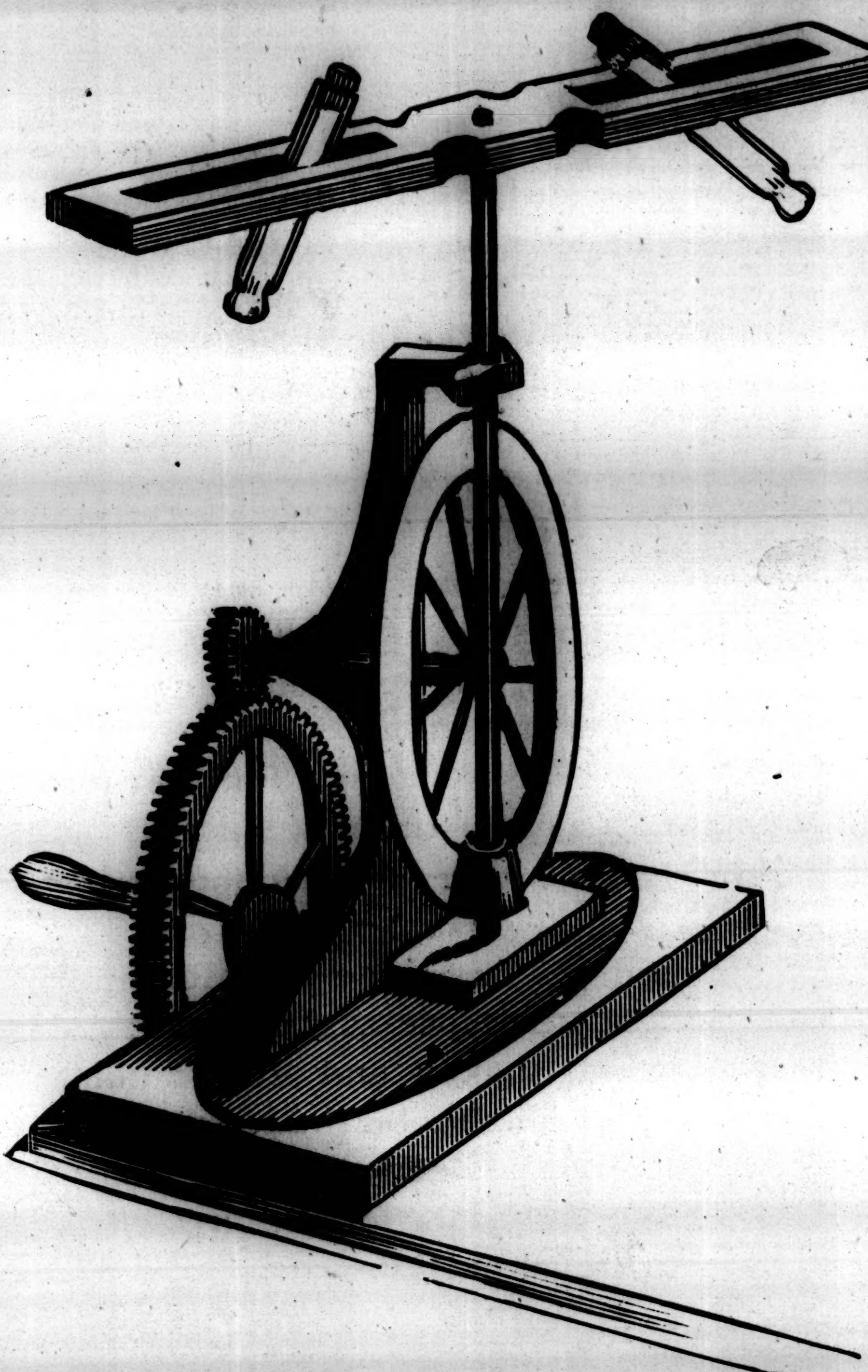
[Reported by **Frank Fisher, B. A., M. D.**]

The Centrifugal Machine.

Gentlemen: In the examination of physiological and pathological fluids for their morphological constituents we place them in a conical-shaped glass, and after a time remove, by means of a pipette, the sediment which has been deposited; this in turn is placed on an object-glass for microscopical examination. We may also pass the fluid through a filter, and examine the sediment which has accummulated on the latter. Both methods are faulty. Take, for example, the urine: When this fluid contains casts or blood corpuscles, too long a period elapses before they are deposited in the bottom of the vessel. Before sedimentation is completed fermentative changes occur in the urine, causing the precipitation of certain adventitious products which interfere with the important elements sought for. We also know that in urine containing casts the latter are frequently digested, and when peptonuria is present we may search for them in vain.

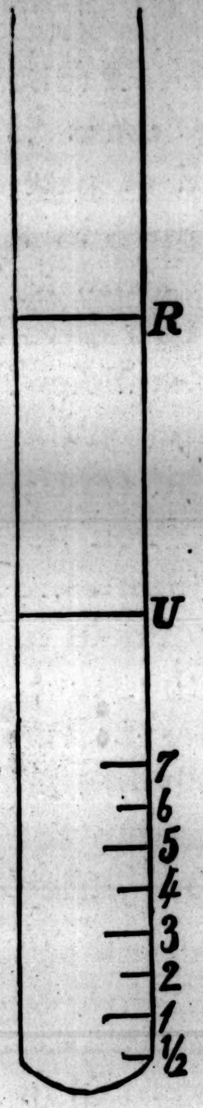
These inconveniences are now obviated by the employment of centrifugal force, which accomplishes in a few minutes that which formerly required hours. The instrument that I here show you (*see p. 179*) generates this force and was designed by Thor Stenbeck, a Swedish student. The motion is produced by two cogwheels that put in action a large beveled friction wheel, which in turn engages with a smaller friction wheel of rubber, causing a vertical spindle to revolve rapidly; to the latter a horizontal arm is connected equally divided from a common centre and containing two glass tubes, each with a capacity of 15 c.cm. You will observe that the tubes terminate in a bulbous end, which serves a very useful purpose in retaining the sediment when the supernatant liquid is poured off.

Without entering into a detailed description of the many uses to which this apparatus may be put, let me show you a few specimens, the nature of which have been specially determined by the centrifugal machine. The first is a specimen of sputum expectorated by a patient in bed 15, ward G. This patient has pronounced signs of pulmonary consolidation with cavity formation, and although his sputum has been examined repeatedly (at least ten times), for tubercle bacilli both by Dr. Riley and myself, they could not be demonstrated. You know that when the tubercle bacilli are few in number in the sputum we employ the method of Biedert for their detection. I will proceed to carry out this method of examination. I take one tablespoonful of sputum with two of water, and add fifteen drops of caustic soda; this mixture is cooked in a test tube until the entire mass is liquified. Instead of placing this liquified mass in a conical glass, and allowing it to remain for two days, in order to get sufficient sediment for examination, I will put it in the centrifugal apparatus. You see that, after two minutes, I obtain a dense sediment in the bottom of the tube, which I will place in the hands of Dr. Riley, who will at once examine for the bacilli. [Dr. Riley found a dense colony of tubercle bacilli.] I may also say that the elastic fibres can be determined in an equally rapid manner.



The next specimen is the urine of a child three years old, seen in consultation with Dr. Richter, that presented all the signs of an acute hemorrhagic nephritis. There was no previous infectious disease; no history of cold; nor, in fact, could any etiology be determined for the nephritis, and it is impossible to say whether this was an acute, or an exacerbation of a chronic affection. All that could be learned was, that ten months previous the child had had a convulsion. Although the albumin had entirely disappeared from the urine, and the patient had been restored to apparently good health, there lingered in my mind a suspicion that this was an exacerbation of a chronic affection. I repeatedly sought to obtain a sediment from the urine in the usual way, but without result. With the centrifugal apparatus, however, a sediment was obtained in a few minutes, and in it a large number of granular casts could be detected. I have no hesitancy in saying that the child did not suffer from an acute, but from the exacerbation of a chronic nephritis.

One of my patients passes a urine which is very turbid. The cause of the turbidity I could never learn, for the reason that no sediment could be obtained. Placing a fresh sample of this urine in the centrifugal apparatus, the fluid at once became clear, and in the bottom of the tube a sediment was seen which, under the microscope, consisted wholly of bacteria. This was a case of bacteruria, as described by Roberts. Prof. Litten, who has perhaps made the most extensive investigations with this apparatus, claims that even from urine which is as clear as water, a sediment can be obtained. The next specimen is a sample of urine from a patient of Dr. Sanderson. The doctor wished to determine whether there were any casts in the urine. He allowed it to stand for more than three hours, but could obtain no sediment. A sample placed in the apparatus yielded a sediment in a few minutes, which, under the microscope, contained more casts than I had ever seen in a single specimen.



I will now show you a sample of urine containing blood. I will test for blood in the urine by Heller's method. This test is based on the fact that if urine be heated with caustic potash, the earthy phosphates in precipitating carry down the blood-coloring matter, and appear reddish-brown instead of white. You see that this test is negative. I may add that the spectroscope fails to show blood. I will next introduce into one of the tubes of the apparatus some of the urine which proved negative to Heller's and to the spectroscopic test. You will observe, in the bottom of the tube, a distinct drop of blood. The apparatus shows not only the presence, but the exact quantity of blood in the urine, so that it serves as an accurate means of quantitative determination.

The next specimen of urine contains albumin. For the quantitative determination of albumin in the urine we use Esbach's albuminometer. This consists of a test tube, as shown in the accompanying engraving, marked at its upper end U and R, and at the bottom 1, 2, 3, 4, 5, 6 and 7. The urine is added up to U and the reägent (picric acid, gm. 10; citric acid, gm. 20; water, c.cm. 1000) to R. The tube is well shaken, and after standing 24 hours the level of the precipitate is read off, the number on the scale representing grammes of albumin per litre. To obtain the percentage the respective figure is divided by ten. Instead of waiting 24 hours for the precipitate to form, I place the albuminometer in the centrifugal machine, and find that in a few minutes precipitation is completed.

If you have no albuminometer you can approximately determine the quantity of albumin in the urine after the heat test, and the addition of one or two drops of acetic acid, or ten to twenty drops of nitric acid, by the degree of precipitation, if you allow the urine to stand for 24 hours. If the precipitate only fills the curved part of the test tube there is 0.05 per cent. present; when the coagulum reaches $\frac{1}{10}$ the way up, 0.1 per cent.; $\frac{1}{4}$ the way up, 0.25 per cent.; $\frac{1}{3}$ the way up, 0.5 per cent.; $\frac{1}{2}$ the way up, 1 per cent.; when the whole fluid is completely coagulated, 2 to 3 per cent. The centrifugal apparatus will complete the precipitation in a few minutes, which in the ordinary way would require at least 24 hours. Let me direct your attention to a statement frequently appearing in our medical journals, which you must avoid. Urine is often said to contain 50 or a greater percenage of albumin. The fallacy of this statement is at once apparent when you remember the fact that the blood serum only contains about 5 per cent. of albumin, and it is exceedingly infrequent to find more than 2 per cent. of albumin in the urine. I believe I have furnished you with sufficient evidence to show that the centrifugal machine is not only a useful but an indispensable addendum to our medical apparatus.

A YEAR'S WORK AT THE SAN FRANCISCO CHILDREN'S HOSPITAL.

By **Charlotte B. Brown, M. D.**, Physician to the Hospital.

Read Before the San Francisco County Medical Society.

The annual report of the Children's Hospital for 1891 has been printed and is already before you; I shall therefore only mention a few figures derived from it. During the year there have been 611 patients in the house, an average of 30.939 days. 49 beds have been filled with free patients, averaging 17.155 days; so that more than half of our work is absolutely free. There have been 30 nurses in the training school continuously, and it gives me great pleasure to say that three of our graduates are now in charge of hospitals at different points on the coast.

Our contagious disease service reports 79 cases, with a mortality of 15. The low vitality of many of the children brought to us suffering from diphtheria and from the complications of whooping cough account for this. Intubation was frequently employed, and there were two cases of tracheotomy, both of which terminated fatally. It is greatly to be regretted that no public fund exists for the care of contagious diseases. Amongst the foregoing cases two only, and those from one family, contributed anything towards their support. The great expense attending proper isolation and disinfection will compel us, in the present state of our finances, to refuse admittance to the isolated cottage to outside cases. During the past year, in addition to the services of one interne, four nurses (one for each disease) have frequently been required.

In the eye and ear service the diseases are largely chronic, the cases of the poor and neglected; and the results, over two-thirds discharged cured, have been due to untiring and painstaking work on the part of Dr. Sargent.

The service of the orthopedist, Dr. Sherman, is already familiar to the Society, through the cases that he has, from time to time, presented during the past year. I shall only say that the results achieved in these cases have been even beyond his expectation; and if a country home existed where these children could be sent when they no longer needed doctors and nurses, and where they could be intelligently cared for, fed and taught to earn their own living, many of these cripples would attain a hearty old age.

The following cases have been selected from amongst those occurring in my service during the year, as being of sufficient interest for presentation and for discussion this evening. The case which I shall now present to you offers the following history. I have been unable to find a similar one in the literature of the subject. The diagnoses suggested on observation were sarcoma or molluscum contagiosum, but from the results of treatment it is probably one of sebaceous adenomata:

CASE I.—*Sebaceous Adenomata.*—F. M——, aged 9 years; native of California, was admitted to the Hospital Sept. 11, 1891. Mother has weak lungs; father healthy; seven other children are healthy. Patient has had pertussis and scarlet fever. On admission, poor appetite, constipated, anemic; weight 39 pounds; evening temperature ranging to 102° F.; very free suppuration going on in several places on the face and head; many wens on the head and face. The mother first noticed the presence of small papules on the face when the child was four months old. These gradually increased in size and number, one growing as large as a turkey egg. Some of the tumors suppurated, then healed slowly, leaving a scar; some of the smaller ones were absorbed without suppuration. There is no pain until suppuration occurs. At date of admission there were tumors of various sizes all over the head and face. Some were broken down, others showing no signs of suppuration, being freely movable and painless. The whole left cheek was a suppurating surface, where several tumors had broken down. There was one tumor over the right scapula and one small one on the chest. These were the only ones on the body. The microscopical examination of one of the excised tumors was as follows: "It is undoubtedly a case of sebaceous cysts, not due to retention of sebaceous matter, but being a real adenomata of the sebaceous glands, showing no gland opening on the top, and in no way connected with a gland duct." The tumors were very friable, and sections, entire, therefore, difficult to obtain. During the five months that the child has been in hospital suppurating surfaces have been dressed daily, or every alternate day, with various applications; aristol, and aristol with equal parts subcarbonate of bismuth, giving the best results. The incisions for complete removal of the tumors healed, in nearly every case, very quickly; while, where the contents were squeezed out, there was a suppurating surface left. The child has increased in weight from 37 to 49 pounds, notwithstanding the repeated operations, and is now cheerful and happy, whereas, before, she was continually whining and crying At first, owing to her feeble condition, she bore the ether very poorly and only a few glands could be removed each time; but since January 1st her general health has been so much better that the last three etherizations have been most satisfactory. Up to that time the sacs, and sinuses between tumors, had been freely irrigated with peroxide of hydrogen (Marchand's) exuberant granulations on parts where the tumors had broken down were touched with solid nitrate of silver or a strong solution. At the last operation I used a sharp curette, and scraped out large quantities of granulations in every unhealthy spot. I think we can feel that this has been the last occasion, though you will notice her forehead [patient exhibited] is, still, not very smooth. I regret being unable to give the exact number of tumors removed, but 75 is not far from correct, and under 11 etherizations.

CASE II.—*Congenital Coccygeal Tumor.*—Baby A——, male; aged 3 months; was admitted to the Hospital September 5 1890, with the following history: Born in one of the mountain counties of California, the first child, of healthy American parents; pregnancy of mother and labor normal. The child weighed, at birth, 5½ pounds, and was perfectly formed, except that on the right buttock, about an inch from the anus and somewhat behind it, a tumor presented about the size of an English walnut. From its location, and the fact that there was some fluctuation, spina bifida was feared, and interference was postponed. On examination the baby appeared to be a well, strong child, weighing 13½ pounds; with his growth the tumor had increased rapidly, so that every indication for its removal existed. The mass measured 8 inches in circumference, and was elevated 3 inches from the buttock, the base being broad and very firmly attached. On palpation it appeared to contain solid and fluid matter, and was irregular to the touch. On the right side a purple spot was apparent, otherwise the covering was ordinary, healthy skin. Under chloroform the operation was begun by making two eliptical incisions near the base, the design being to dissect the tumor from these flaps and remove it entire. Its union with the skin, however, was so firm that an opening into the cyst and the escape of its fluid contents promptly occurred; about 4 oz. of a pale, yellow fluid was discharged. The inside of this cyst-wall felt rough to the touch, as if covered with short, stiff hairs. The purple spot was found to be due to a very thin point in the cyst-wall. Dissecting beneath the mass and to the right another cyst, filled with creamy sebaceous matter, was opened. Parts of the tissue dissected up seemed almost cartilaginous. The external mass having been removed, a third cyst was to be seen extending deeply into the pelvis. Its removal was attended with great difficulty, as it surrounded and seemed a part of the coccyx, so that the bone had to be amputated. It was necessary to dissect the wall of this cyst from the rectum for more than one inch by half an inch in breadth. The fourth cyst, about as large as an almond, was enucleated above this attachment to the bowel. The contents of these cysts were almost like boiled starch, while a fifth cyst, filled with cheesy matter, firmly adherent to the inner face of the sacrum, was opened and thoroughly cleansed. The operation was a prolonged one, and it was deemed best not to attempt the removal of this sac, as it was attached so high up on the sacrum. Its cavity was packed with iodoform gauze, an end projecting for drainage, and the cyst-wall stitched to the external wound. The baby did well, taking only a few drops of whisky three times a day for a few days, and no medicine of any kind. He was fortunate in being nourished by his mother. The wound, owing to its depth, healed by granulation, and at the end of three and a half weeks had so far healed that the child was sent home. The treatment of the wound was strictly antiseptic, the first dressing being undisturbed for four days, and there was no suppuration. No microscopical examination of the growth was made.

February 22, 1891, the mother writes that a piece of the gauze had come out at the opening, which, however, looked very healthy; the baby had grown, and could sit alone; had 6 teeth at 8 months of age. She describes the opening as "looking like an ear which had been pierced." August 4th the mother writes: "About April 1st more gauze came from the wound. It looked clean and had no odor; pus looked natural, and evidently it gives him no pain, for he tumbles around as any other baby would. He walks by holding on to chairs, and has two double teeth." In October the mother brought the child to the city, where I etherized him and found it impossible to introduce the smallest probe more than one could into a dimple. The discharge which comes is a clear, watery fluid, which, in six hours, would cause on his napkin a spot as large as a finger nail, of a light yellow appearance when dried. January 7, 1892, his mother writes of an illness he had just had; a severe cold and cutting the eye-tooth; great pain when he was moved, evidently in his back and head. The discharge had been very slight for some time before this. The doctor thought it was "la grippe," but when he saw that some redness had appeared around the opening and that it was swollen, doubted his diagnosis. The next day a free discharge of thick, yellowish green pus appeared, and he concluded it had been a case of spinal meningitis. Baby had three or four slight spasms before the pus came, but rallied very promptly afterwards and in two or three days seemed quite well, trying to walk, and the discharge again became slight. February 29th, the mother writes: "Baby is as well as ever; sometimes the opening is so small I cannot see it; still a slight discharge; he runs out of doors, is as well and hearty as any child, and I do nothing except to keep the parts clean." Without doubt, looking at the subsequent history, there is an opening on the inner side of the sacrum into the spinal canal, and the tumor removed was a dermoid communicating with the spinal column. The future of the case will be of interest. I doubt if it ever entirely closes, but cannot see how so slight an oozing can do harm, or how we would be justified in not removing the mass.

The literature on these growths is very meagre. The "Cyclopedia of Diseases of Children" (vol. III,) only refers to the possibility of malignant growths in this location or of dermoid cysts, but gives no particulars. Smith's Surgery merely refers to the existence of such tumors, but does not enter into their structure or cause. Dr. Agnes Lowry has kindly furnished the following references from Charpentier's Obstetrics, where, under the heading "Dystocia," these tumors are referred to in detail:

"Tumors of the ano-perineal or coccygeal region, are common. (1) Tumors composed of malignant neoplasm. (2) Simple cystic productions attached to the sacrum. (3) Lipomas. (4) Spina bifidas, fungoid growths. (5) Tumors formed by fetal inclusion or dermoid cysts, which tumors may attain to enormous size, reaching at times to the heels. These tumors are generally of hemispherical or elongated form, surface smooth or irregular. They are usually situated on the anterior face of the sacrum and coccyx and project from the perineum behind the anus. However, they may arise from the posterior surface of the sacrum. Some seem to be attached to the point of the coccyx. In some cases there exists a second fetal tumor included in the abdomen and which is united to the perineal tumor. In these tumors are found solids, liquids, fatty matter and multiple serous cysts. Sometimes they are entirely independent of the pelvic bones, but usually adhere to the sacrum or coccyx, by means of a pedicle of variable size, which is usually vascular. By the side of these tumors, due to fetal inclusion, are found tumors communicating with the spinal canal, hydrorachis, spina bifida, a simple hernia of the envelope of the cord, or of the cord itself. Also cysts, sarcomas, cysto-sarcomas, fibromas, lipomas, and tumors, solid and liquid, enclosing all the preceding varieties. Enterocystomata are closely allied to congenital diverticula of the intestines, closed sacs filled with liquid, and exhibiting the same structure as the walls of the bone."

CASE III.—*Atresia of the Vagina.*—M—— was sent to me by Dr. C. Annette Buckel, of Oakland. The patient, who was 3½ months pregnant, had come to her complaining of a continuous slight bloody discharge. On examination no os could be felt, and apparently no opening in the septum existed, and yet bimanually the enlarged uterus could be palpated. Stretching the parts well with a large bivalve, and throwing in a strong light, after feeling carefully the roof of the vagina in every part, with a Sims probe, a pinhole opening was found, from which a slight, dark discharge flowed. After admission to the Hospital, patient was etherized and a crucial incision made from the opening, when the cervix appeared. The discharge was probably due to retention of normal secretions, and there was some vaginitis probably from the same cause. The thickest part of the septum was in front, by the bladder, and the space from the pubes to the cervix was very short. I did not wish to interrupt pregnancy, and yet desired, as much as possible, to unfold, as it were, these thickened tissues in the front wall of the vagina, so they were well packed with iodoform gauze, held in place by sachets of cotton. The dressing was not disturbed for five days; injections and alternate packings were continued for two weeks. The patient went to full term, and was delivered instrumentally, owing to delay in the second stage, of a 9-pound boy.

Cases of Abdominal Section.—CASE IV.—*Ovarian Cyst, with Double Pyosalpinx.*—E. G——, aged 23 years; native of Germany; weight 105 pounds; no children; admitted to Hospital March 7, 1891. In the past year has had headaches, backache, pain over both ovaries, profuse leucorrhea, menorrhagia and dysmenorrhea. At the right of the cervix uteri was palpated a fluctuating mass the size of a fetal head, tender on abdominal pressure, and extensive inflammation over the whole roof of the pelvis: March 10, 1891, a median incision, 3½ inches in length, was made, and extensive adhesions were found on the right side, both to the bowels and to the walls of the pelvis. A cyst of the right ovary was removed, the left ovary was found to be degenerated, and both tubes were very hard. The ovaries and tubes were removed. The cyst of the ovary contained an amber colored fluid, and some cheesy matter. As there was some hemorrhage from the intestinal surfaces which had been separated from the mass, these points were touched with the thermo-cautery. A glass drainage tube was inserted. The patient rallied well, and her recovery was uninterrupted. The drainage-tube was removed on the fifth, and sutures on the eighth day. A good cicatrix resulted; patient was discharged at the end of five weeks and has since been perfectly well.

CASE V.—*Oöphorectomy.*—M. M——; aged 36 years; single; native of

Nova Scotia; family history of tuberculosis; by occupation a domestic; has been an invalid for several years, suffering from great pain in left side, dysmenorrhea, dyspepsia, nervousness and sleeplessness; admitted to hospital in November, 1890. The cervix was dilated, and local and constitutional treatment continued for 11 weeks, with no improvement. Patient scarcely left her bed unless compelled to do so. Operation performed January 21, 1891. Left ovary very friable, with some adhesions. Both ovaries were removed. Convalescence was uninterrupted. Her general condition and also her digestion was improved. She gained in weight, but *thought* she was no better, and it required almost superhuman efforts to keep her up. She procured some artificial dentures, which, aiding digestion and with the most persistent moral influence by her attending physician, have resulted in restoring a healthy, useful woman to the community.

CASE VI.—*Oöphorectomy.*—M. H——; aged 56 years; native of England; has been a constant sufferer with pelvic distress, frequent urination, great pressure on standing, and a very distressed expression of face. A careful study of the case showed no bladder or kidney disease. No local treatment was possible on account of the pain. Medication, electricity, or nursing produced no improvement, and, after consultation, it was decided to operate. On opening the abdomen, the pelvis was found packed with the small intestine, not less than ¾ being contained in it. Both ovaries were removed, and the intestines replaced in the abdominal cavity. The patient was kept for two weeks on an incline plane, the foot of the bed being raised six inches and no pillow used. Convalescence was slow, patient remaining in Hospital three months. At present, nine months after operation, she is in comfortable health, and has been able to nurse two of her children through typhoid fever without breaking down.

CASE VII.—*Dislocated Spleen.*—M. B——, admitted for an exploratory incision on account of a tumor in the left side of the abdomen, which gave her great trouble. Patient had been in the Hospital two years previous, when an operation on the uterus, diagnosed as the seat of malignant disease by the microscope, had been refused. At that time a tumor removed from the ear was pronounced malignant by the pathologist. On returning home her physician had made a high amputation of the cervix with good results, but desired that the present operation should be done in the Hospital. March 25, 1891, an incision in the median line was made rather higher than usual, and the tumor found to be an enlarged 3-lobed spleen displaced. The adhesions around the uterus were broken up, the left ovary was hard and cystic, but was not removed. The cavity was flushed and the wound closed. She made a good recovery, and her condition after rest and care in the Hospital was quite satisfactory. Up to the present there has been no new manifestation of disease.

CASE VIII.—*Ventral Hernia.*—M. D——, operated upon April 14, 1891, for a ventral hernia, following prolonged use of the drainage tube after hysterectomy three years ago. Four inches of the lower part of the dilated cicatrix was excised and the peritoneum stitched with catgut. Deep and superficial sutures were taken in the abdominal wall, and the patient, who was very fleshy, was kept in bed for three weeks, with an abdominal bandage firmly applied. Though union has remained most satisfactory, she has continued to wear a losely woven elastic belt.

CASE IX.—*Pelvic and Abdominal Abscesses.*—M. L——, was operated on with a temperature of 103° F., and pulse of 144, the diagnosis being peritonitis from ruptured abdominal abscess. She had been admitted two days previously for abdominal section, and owing to her prostrate condition the operation was delayed until the gravity of the case was such that death seemed impending. Three large pus sacs, containing at least three pints of pus, were cleaned out, the most prominent one having ruptured into the abdomen; the deep one in the pelvis was evidently of years' standing, the history of the case being: a septic peritonitis following labor, 16 years ago, and of continued ill health ever since. Her complexion was so yellow as to be very noticable, due probably to the long retention of pus. The appendages were not removed, owing to the feeble condition of the patient, the fear of prolonged anesthesia and the extensive adhesions. Three drainage tubes (one for each abscess) were used. Convalescence was most satisfactory, and present health is better than for years.

CASE X.—*Pelvic Abscess.*—M. H——, also a case of pelvic abcess, was drained in a similar manner, with most satisfactory results.

CASE XI.—*Hysterorraphy.*—M. S——, aged 17, native of California, had been under my care for a year for prolapsed ovaries and retroversion, evidently congenital, as she had since her 13th year, when her menses appeared, been subject to violent headaches, and had in consequence been in the hands of able gynecologists in Southern California. Pessaries did not correct the trouble perfectly, and when she returned to her home, and was not under the care of a physician, the pain was much aggravated. In October, 1891, it was decided to open the abdomen and tie up the ovarian ligaments, by Dr. Howard Kelly's method. A short incision was made in the median line, then three fine silk sutures were introduced into the peritoneum of the anterior wall on each side in a transverse position, about a quarter of an inch apart. The finger was then passed down behind the uterus and the ovary brought up. An aneurism needle, armed with a thread, was next passed beneath the ligament of the ovary, between it and the uterus. Through the loop the three lower ends of the sutures in the anterior abdominal wall were passed, drawn through and tied from within outward. The uterus is lifted forward and the ovaries held in place, the position of the parts being likened to a person lifted up by the shoulder blades. Some adhesions probably take place at the line of suture, but Dr. Kelly says he has had some cases where pregnancy has occurred later, with no ill effects. The case on which I operated made a good recovery; the ovaries and uterus are in normal position, and though six months have now passed since the operation, no support is needed.

The following cases are of great interest when compared as to the site of origin:

CASE XII.—*Malignant Abdominal Tumors, Origin from the Vesico-uterine Peritoneum.*—M. F——; aged 77; native of Ireland, of previous excellent health. During the last year had noticed the growth of an abdominal tumor, and at present time was suffering very much from her stomach and from great restlessness. *Diagnosis*—Ovarian cyst, multilocular and with adhesions. Its possible malignancy was considered, though no signs of such condition existed. Several physicians advised interference, and, as she was in good condition, except a weak heart, the operation was performed September 8, 1891. The tumor, which was found to be a single cyst, was adherent extensively. The tissues were very friable, and three openings into the intestine were made in separating the adhesions. Patient bore the ether well, and the operation was completed, but she did not rally from the shock, and died twelve hours later. *Autopsy*—Thirteen hours after death. Great agglutination of the small intestines. Fatty deposits in the mesentery. Omentum and large intestine adherent to under side of liver. Extensive bands of old adhesions everywhere. Left ovary the size of a Lima bean; right tube thickened and cystic; right ovary not found. The tumor sprung from the peritoneum between the uterus and the bladder; the fundus of the latter seemed involved in it. A second tumor, the size of a man's fist, was found in the mesentery, 12 inches below the cecum. No microscopical examination was made, but the case was undoubtedly malignant.

CASE XIII.—*Abdominal Tumor, Origin from the Vesico-uterine Peritoneum; No Operation.*—M. E——, aged 40 years; a native of Peru, was an inmate of the Hospital for five months, suffering from a lesion of the spinal cord. She had also an abdominal tumor. The notes of the *post-mortem* examination are as follows: "To the left and about an inch above the crest of the ilium was found a very hard kidney-shaped tumor, 4x3x2½ inches. The capsule was very dense and easily stripped from the mass within, which presented the appearance of the fibre of boiled meat. The tumor arose from the parts between the bladder and uterus, to which it was loosely connected by adhesion. No pedicle or any other attachment was found. Microscopic examination showed it to be a fibroma. The origin of the tumor in these two cases, from neither uterus nor appendages, seems peculiar.

Reviewing the cases of abdominal section, there have been: (1) Two oöphorectomies, where, perhaps, the lesions of the ovaries were not marked, but where the patients were hopeless, chronic, invalids. Now, as the result of operative and other treatment, they are useful members of society—one caring for her family, the other earning her living. (2) Two cases of pelvic abscess drained, patients restored to health. (3) One case of malignant tumor with fatal result. (4) One case of ventral hernia, cured. (5) One exploratory incision for dislocated spleen. (6) One cyst of the ovary with double salpingitis, cured. (7) One hysterorraphy.

Removal of the Breast—Operations for cancer of the breast have been done as recommended by Dr. Halstead, surgeon of the Johns Hopkins Hospital: A linear incision is made from a point 3 to 5 cm. below the middle of the clavicle, down the arm, to a point below the insertion of the pectoralis major muscle. The knife is then reintroduced at the starting point, and the tumor circumscribed by a skin incision, giving the diseased tissues a wide berth, of at least 5 cm. Each bleeding point, as it presents, is at once caught by an artery clamp. The tumor, the entire breast, and all of the healthy tissues which have been circumscribed by the skin incision are removed in one piece, from within outwards, by cutting and tearing from the ribs and from the fascia which covers the pectoralis major. The triangular skin flap is next dissected back to its base and the axillary contents, and with them all the cellular tissue and fat which covers the chest wall is dissected off clean from the ribs. Finally, from a reflected flap, two strong silk approximation sutures are taken from the under side of the skin, at about 1½ cm. from its cut margins. The flap is then pressed up into the axilla to as high a point as possible, and held, while its edges are stitched with buried skin sutures to the skin of the chest-wall. The open wound is allowed to fill with blood, and the clot protected from the dressing by strips of gutta-percha tissue. The results are most excellent. The dressing is changed for the first time 12 to 14 days after the operation. In my case I have removed the approximation sutures after three weeks, but in a letter from Dr. Halstead on the subject, he says there is no need of ever removing them.

Trachelorraphy and Perineorraphy—There have been a large number of plastic operations in the cervix and on the perineum. In the latter case for partial laceration and for complete or through the sphincter. The perineal lacerations have been repaired by the flap-splitting method in some cases; in others by the usual operations. Generally both cervix and perineum are repaired at the same time, and even when the perineum has been lacerated extensively. The more prolonged anesthesia does not seem as serious as a second operation. There are cases, however, where but little preliminary care can be given the case, and then I insist on three weeks *in bed*, and make, during the time, two operations. An important matter in curing these cases of internal and external lacerations is to be sure, by watching them long enough after they leave the Hospital, to know that the uterus is in place and the endometritis cured.

Antisepsis and Asepsis.—Since the early part of June, 1891, I have given up entirely the use of antiseptic solutions. All water used for vaginal douches, irrigation, or flushing of wounds must be boiled and strained through flannel. All absorbent cotton, dressings, and instruments must be boiled or baked in an Alladin oven, used only for such work. Sponges are used only in laparotomies, and then thoroughly cleansed beforehand by frequent immersions in boiling water, previously strained. We have also bought cheaper sponges, and used them only once. After each morning's work, the instruments are scoured with sapolio, or silver polish, then scalded and dried. Each day, before any office work, they are placed in the sterilizer. Not a single case has shown any sign of sepsis under this treatment, and I feel quite satisfied with the result of its use. Nurses learn the importance of *absolute clean-*

liness, which is of the greatest value. As yet I have not given up the use of iodoform in the dressing of wounds.

MENIÈRE'S DISEASE.

By **W. E. Bates**, M.D., Davisville, Cal., formerly Superintendent St. Luke's Hospital, San Francisco; Resident Physician City and County Hospital, San Francisco.

Read before the Yolo County Medical Society.

Having observed some cases of this rather rare disease in the wake of the recent epidemic of influenza, and having heard of several more in the practice of others, I have thought it might be of interest to bring the subject before this Society.

The term "Menière's Disease" has been used so indiscriminately that it may be well at the outset to define it. P. Menière, who had charge of a deaf and dumb institution at Paris, in a paper presented to the Academy of Medicine of that city in 1861, stated that he had seen a large number of cases during many years that presented the same symptoms, always manifesting themselves at intervals during weeks, months, and even years, and as a rule ending with destruction of hearing. The symptoms as described by Menière are as follows: There is an apoplectiform attack accompanied by tinnitus aurium, dizziness, and vomiting, leading to a loss of consciousness of longer or shorter duration. These alarming symptoms soon pass off, leaving only a staggering gait, which also as a rule disappears, and complete recovery takes place, except that there remains almost always marked deafness, accompanied by continuous subjective noises in the ear. An examination of the ear reveals no visible changes, and the aural trouble remains, in spite of treatment, incurable.

In his memoir to the *Gazette Mèdicale de Paris*, the following typical case was reported: "A young and robust man, suddenly experienced, without appreciable cause, vertigo, nausea, and vomiting; the pale face bathed in perspiration announced impending syncope. After staggering, the patient became deaf and fell to the ground, unable to get up. Lying thus on his back he could not open his eyes without seeing the objects around him apparently whirling around in space; the slightest movement of the head increased the nausea and vertigo; and vomiting recurred whenever the patient attempted a change of position. These conditions were in no way dependent upon an empty or full stomach, and occurred apparently during perfectly good health."

As all functional disturbances, except deafness, sooner or later disappeared, Menière was led to suspect that the entire chain of symptoms was due to disturbances in a single organ, and as the tinnitus and deafness remained, even after years, although the patient was in the best of health, he fixed upon the ear as the seat of trouble. Since examination showed the external and middle ear to be normal, he regarded the labyrinth as the part affected. This view was confirmed by the case of a young lady who died on the fifth day of the disease, the autopsy showing the brain and cord to be intact. The semicircular canals, however, contained a red plastic mass, a sort of bloody exudation, with scarcely a trace in the vestibule, while the cochlea was entirely clear. The exact cause of death remained unexplained.

Menière summarizes as follows: (1) An auditory apparatus hitherto perfectly normal, can suddenly become the seat of functional disturbances, consisting of noises of variable character, continuous or intermittent, and accompanied soon by a greater or less diminution of hearing. (2) These functional disturbances located in the internal auditory apparatus can give rise to phenomena that are regarded as cerebral, such as vertigo, deafness, uncertain gait, turning about and falling, and, furthermore, they are accompanied by nausea, vomiting and syncope. (3) These accidents of an intermittent type are at last followed by deafness, becoming more and more profound, though the hearing is often abolished suddenly and completely. (4) All this leads to the belief that the lesion causing all these functional troubles is located in the semicircular canals.

In 1828 Flourens, experimenting upon pigeons, found that a lesion of the semicircular canals on one side of the head produced a temporary pendulum-like motion of the head towards the injured side. In cases of bilateral lesion of the horizontal canals, the motion was in a vertical direction. After lesion of one horizontal canal the bird would turn only to that side, and after injuring the vertical canals it would fall from before backwards. According to his observations, audition was maintained throughout. Owing to the fact that a destruction of the cochlearis always caused complete deafness, and a destruction of the nervous vestibuli produced all the observed motor disturbances without deafness, he concluded that the auditory nerve had two distinct functions. This conclusion was accepted by such men as Czermak, Brown-Séquard, Vulpian and others, but Goltz later on, in 1870, placed the question in a new light. In further experimenting with pigeons he found in two cases that a destruction of the canals produced a revolution of the head of 180°. The occiput thus lying upon the floor, beak upwards, and when the bird attempted to move, its body would revolve around the head as a centre. From this he reasoned that the semicircular canals are "organs of sense for the maintenance of the equilibrium of the head, as also indirectly, of the entire body." This later theory was supported by such men as Brunner, Mach and Crum-Brown, but later all of the foregoing conclusions seemed to have been swept away by the investigations of Arthur Böttcher in 1872.[1]

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[1] Archiv. f. Ohrenheilkunde, 1874.

By first operating upon frogs, in a somewhat different manner from his predecessors, Böttcher was able to destroy the semicircular canals without producing any of the peculiar movements of the head described by Flourens. This induced him to carry his experiments further, using pigeons, as had his predecessor. In his first series of experiments, when he used no special precautions as to hemorrhage from the vessels in the neighborhood of the semicircular canals, his results were almost identical with those of Flourens, Goltz and others. In a second series of cases, however, when exercising great care in performing the operations, the results varied considerably. I will here give them in outline, as these results are very important: In one case, after division of the inner vertical canal of one side, the bird showed a tendency to fall forward, but this continued only for two days. After division of the horizontal canal of the opposite side, pendulum-like movements of the head began, and the bird showed a tendency to fall toward that side. The pendulum-like movements, however, soon ceased, and the bird slowly recovered the use of its legs. The power of flight was totally lost after the second operation. In a second experiment, after a division of the semicircular canals, the tendency to move in a circle was observed, but this soon passed off. Although a semicircular canal on each side had been divided, no pendulum-like movements occurred. A short time after the operation, and notwithstanding the fact that the continuity of the semicircular canals was broken on both sides, no disturbance of the equilibrium could be noticed. Furthermore, the tendency to move in a circle was scarcely noticeable when the bird walked, while during flight it was well marked. The peculiar manner of holding the head sideways, and the attacks of bringing the head down in such a way that the top would touch the floor, did not appear as the immediate result of the operation, but for the first time, as late as four weeks after; that is, after the full disappearance of all the immediate effects of the operation. These peculiar symptoms were, therefore, due to some disturbances which must have developed at a later date, and were only indirectly connected with the division of the semicircular canals. The rolling movements appeared in connection with the rotation of the head whenever the bird was very greatly disturbed. There was no appreciable connection between them and the tendency to move in a circle. The latter symptom was noticeable for a long time before the rolling movements appeared, and when these came, the tendency to move in a circle disappeared.

In a third experiment after division of both outer semicircular canals, the twisting of the head and the rolling movements did not appear until the lapse of about three weeks. There was a total loss of the power of flight and the left leg appeared to be permanently effected. At the autopsy, an extravasation of blood was found in the pia mater, on the left side, just over the origin of the auditory nerve. The supposition is therefore justifiable that the symptoms which developed later—the twisting of the head and the rolling movements—were due to this extravasation. In a fourth experiment after the division of the lower arms of both vertical semicircular canals, the bird was still able to hold its head in a perfectly normal position. The ability to walk and the power of flight were very materially diminished; yet they improved very decidedly in the course of a short time. About 10 days after the operation, well-marked pendulum-like movements in a vertical direction set in, and the power of flight appeared to be quite destroyed. At last these symptoms, too, almost entirely disappeared; no lesion was found in the brain or its membranes at the autopsy. In a third series of cases the operation was performed more successfully as regards the avoidance of injury to neighboring important points; and in these cases, after the division of one or more semicircular canals on both sides, but very slight and transient motor disturbances followed; the birds in a very short time entirely recovered their powers of locomotion, of perfectly maintaining their equilibrium, and of picking up particles of food.

By these very important experiments Bötttcher has proved that the semicircular canals may be divided without causing any of the symptoms described by Flourens and Goltz as specially due to a lesion of this apparatus. Böttcher thus states his views regarding this question: "These disturbances of equilibrium manifest themselves either immediately after the operation, and are then due to an injury of the brain; or after the lapse of a few days, in which case they are due to pathological processes which have involved the central portions of the nervous system." He particularly directs attention to the fact that the motor disturbances, when only one side is operated upon, always appear in the extremities of the side upon which the operation has been performed. For instance the movements in a circle are always executed towards the injured side. From this fact he reasons that there is a slight paresis of the foot, or wing, of one side, that would be sufficient to cause these peculiar movements in a circle, which have been hitherto considered as almost specific of a lesion of the semicircular canals.

To refute the assertion of others that the motor paralysis is of too long duration for so slight a lesion, and always takes place on the side of the body corresponding to the lesion, which does not agree with the generally accepted view that an injury to one side of the brain should be followed by a paralysis of the opposite, Böttcher cites the following remarks of Brown-Séquard, in his course of "Lectures on the Physiology and Pathology of the Central Nervous System": "It is a fact worthy of attention that a puncture with a needle through the anterior pyramids, which contain very nearly all, if not all, the nerve fibres employed in voluntary movements, will hardly produce a momentary contraction in some muscles; while certain punctures through the olivary column of the medulla oblongata at once produce a spasm of many muscles, although this column does not contain more than very few (if any at all) voluntary motor fibres! And now to add to the strangeness of the fact, in this last case the muscles remain contracted sometimes for hours, sometimes for days and weeks. There is, therefore, in some parts of the nervous centres a property of acting in a persistent manner to produce muscular spasms during and after a mechanical excitation." Many of the fibres of the lateral and posterior columns of the medulla oblongata and of the pons varolii do not decussate, and therefore produce spasms on the corresponding side of the body. This is important evidence in favor of Böttcher's view, showing, as it does, that a slight injury of the medulla oblongata—the very part of the brain from which the auditory nerve springs—may result in motor disturbances on the corresponding side of the body, and that these disturbances may last for quite a long time.

When, therefore, we consider the fact that the auditory nerve is not bound down at any point, between its origin in the brain and the fundus of the meatus auditorius internus, we can readily understand how easy it is to produce an injury to that portion of the brain from which the nerve originates by drawing upon the nerve in endeavoring to remove the semicircular canals. Still another theory has been advanced, I believe, by Baginsky, to account for the position of the paralysis. He argues that the whole canal apparatus communicates through the wide acqueductus vestibuli with the epicerebral space, so that in the opening of either canal the cranial cavity is opened at the same time, and with the consequent loss of cerebro-spinal fluid, irritation of the surrounding parts of the brain may ensue.

Briefly summarized the various opinions advanced on the pathology of the disease are as follows: (1) Ménière has found upon *post-mortem* examination absolutely no pathological condition except in the semicircular canals. (2) Ménière and others have found severe lesions of the canals without the symptoms of this disease. (3) Some forms of irritation in the middle, and even in the external, ear have produced symptoms of this disease. (4) Some cases of cerebro-spinal meningitis show symptoms of Ménière's disease. (5) In some cases of hysteria and hystero-epilepsy Ménière's symptoms may be observed. (6) In syphilis and tabes dorsalis the same occur. (7) Lucae produced slight symptoms by passing a probe into and irritating the middle ear through an unusually large Eustachian tube. If we attempt to limit ourselves to the term Ménière's disease, as Ménière first described it, we should not diagnose any case as such unless we are satisfied that the internal ear is the seat of the lesion. For that reason some authors make a distinction between Ménière's disease and aural vertigo. While the former is an aural vertigo, according to them, every case of aural vertigo is not a case of Ménière's disease. I would define Ménière's disease to be one in which attacks of dizziness occur suddenly, without known cause, with distinct intermissions of usually quite a length of time; tinnitus, aurium, or other subjective noises ushering in the attack, rapid or gradually occurring deafness and no fever. This excludes acute labyrinthine inflammation, and also dizziness produced by mechanical interference with the ear.

Regarding treatment, galvanism, quinine in large doses, bromides in full doses, phosphorous, the iodides and strychnine are more or less vaunted. I have had satisfactory results from electricity, and can say nothing in regard to the remedies above mentioned.

Having now gone into the pathology, diagnosis, and treatment at some length, I desire to report the following cases:

Case I.—Mrs. A——, aged 46, called on me in the latter part of July, 1891, and gave the following history: Two weeks before coming to me and while recovering from a second attack of influenza, she noticed a noise in the left side of her head like that of dripping water and a sizzing sound in the left ear, accompanied by complete deafness on that side. She consulted a prominent aurist in San Francisco and while on the way to see him, became somewhat dizzy. The aurist punctured the membrana tympani, apparently, stated the membrane looked healthy however, and told the patient she would be all right in a day or two, and to keep quiet. She did so, but the dizziness and noises increased, and at times she would become nauseated and occasionally vomit. She again went to the aurist, who told her to put hot applications to the ear. He remarked that he understood the "sizzing" in her ear, but not the dripping of water. At no time was there any discharge from the ear. She soon found she was not improving, and came to see me. I found her rather a robust looking woman, weighing 140 pounds; very tottering in her gait, not being able to walk at all without watching the floor steadily, and even then, at times, she would fall, unless able to steady herself against a wall or chair, or some stationary object. While sitting in a chair, if she turned her head too suddenly, everything in the room would apparently swim around, and frequently she would become nauseated. A slight "sizzing" noise was complained of in her left ear, and the constant sound of dripping water in the left side of her head, along the parietal eminence. She stated that when a girl she had had a "gathering" in her left ear, and in consequence had remained partially deaf on that side, but since this attack, had become wholly so. After going to bed a nervous condition often came on, with a sense of impending danger. This usually could be overcome by having some one sleep with her and hold her hand, or by taking some elixir of the valerianate of ammonia, which had been recommended by some friend. In walking, she had a tendency to fall toward the affected side. I took her to an aurist in Sacramento who made a thorough examination of the ear, and pronounced it sound, except a scar on the membrana tympani from some previous rupture, and a slight stenosis of the Eustachian tube. The latter I dilated with Pollitzer's bag, relieving, in a measure, the sizzing noise in the ear, but the dripping of water and dizziness still remained as bad as ever. She was then put on full doses of iodide of potassium. In the course of the next few weeks she seemed to improve greatly; the nervousness at night ceased, the dizziness came on only at intervals, and was slight and of short duration. The noise in the ear remained, but was less; her hearing was better, and the noise in the head lighter and intermittent. The hot weather coming on, patient went to Oakland. There she soon began to get worse, though taking her medicine regularly. An aurist in that city was consulted, who gave her full doses of bromide of potassium, but she steadily grew worse and I was summoned to see her. I found an almost complete paralysis of the left side, complete deafness in left ear, and louder ringing than ever; head noises increased in intensity so much that she declared she could feel it in her brain, and all other symptoms increased in proportion. The bromide was stopped, and as the patient looked pale and emaciated (she had lost 15 pounds), she was placed on tr. ferri chlor., and valerianate of ammonia at bedtime. This was continued until she became stronger, and about the middle of September I commenced giving her the galvanic current. The positive pole was applied by an electrode about four inches square to the back of the neck, and the negative by a small sponge electrode first to one ear and then to the other. Applications were made daily, first 3 minutes, increasing the current gradually to just short of the quantity that produced dizziness. In this case at the first sitting it was one milliampere in the left ear and three in the right. As the patient improved the current could be tolerated in increased strength until she was able to stand from 20 to 22 milliamperes in each ear, when she was discharged cured, all of her symptoms including the deafness having gradually disappeared, the patient declaring she could hear as well as before the attack.

Case II—December 15, 1891, was called to see Mrs. B——, living 5 miles south of Davisville. Upon inquiry I found that she had had influenza, which had been followed by a ringing in the right ear, with almost complete deafness. On the day I was called she had become dizzy, with nausea at intervals. She complained of being weak and unable to sleep well on account of nervousness coming on in the night, as well as at times through the day. On examining the ear by reflected light nothing abnormal could be discovered. She was ordered 15 gr. of bromide of sodium three times daily, and instructed to call at the office for electrical treatment as soon as the weather would permit. This she did in the course of a few days, and reported the dizziness somewhat better, nausea gone, and that she slept better. The battery was applied as in the previous case, patient being able to stand but 3 milliamperes in the right ear and 4½ in the left. These applications were made daily, in gradually increasing strength until she was able to take 22 milliamperes in both ears. All unfavorable symptoms gradually subsided until March 1st, when she was discharged cured, with perfect restoration of hearing, and no noises in the ear.

I have a third case now under treatment, but of such recent occurrence that I will reserve a report for some future date.

MEMORANDA.

A Case of Poisoning by Wild Parsnips.

On the evening of February 24, 1892, I was summoned to attend a Mrs. F——, æt. 29, living fifteen miles in the country, the messenger being unable to give further information than that the woman was poisoned. Upon my arrival, at 11:30 P. M., I found her in a condition of semi-stupor, making frequent efforts to vomit, the muscles of the face and left upper extremity undergoing occasional slight spasmodic contractions, the pulse extremely rapid, feeble and irregular, extremities cold, pupils widely dilated, deglutition difficult, with complete muscular paralysis of right upper and both lower extremities; sensation perfect; reflex excitability nearly abolished. Upon being thoroughly aroused, complained only of nausea and pain in stomach; denied having taken anything of a poisonous nature; speech unimpaired; protruded tongue without difficulty. The stomach still containing partially digested food, I administered an emetic, which acted promptly and efficiently, and followed it with a brisk cathartic, coffee and alcoholics. The following information was obtained from the husband: The patient had been in her usual health at dinner time, eleven hours previous to my visit, and had eaten heartily of a boiled dinner, consisting of ham, cabbage, potatoes, beans and parsnips. After dinner she had busied herself ironing, and he had not seen her again until called from the field at about 5 o'clock by his father, who, returning to the house, had found the fire extinguished and heard groans from an adjoining bedroom. Forcing open the door, against which her body was lying, he had found her prone, vomiting and having "light spasms." She remembered only that she had felt "dizzy and sick at the stomach" and had fallen. Questioning him regarding the parsnips, he said they were a volunteer crop, the original bed having been planted several years ago by a former tenant; all had eaten them at dinner except the younger child, who had been given a piece of the mother's, but spat it out after tasting it. I concluded that the parsnips eaten by the mother were poisonous, and that she was suffering from parsnip poisoning, with spinal congestion and possibly hemorrhage. Directing the continuance of the stimulants and requesting a report during the forenoon, I returned home. At the appointed time on the 25th a messenger arrived and stated that the patient was dying when he left and was probably dead at time of report. Later a neighbor arrived in town for the purpose of attending the funeral. From this report and circumstance only, sprung the sensational story[1] which has been going the rounds of the press. Late in the evening of the same day the husband reported her much better. At my visit the following morning (Feb. 26th), being told that she had been flowing, I instituted a vaginal examination, finding in the vagina and removing the product of about a six weeks' conception. All symptoms were much improved except the paralysis. The urine had been retained, necessitating the use of the catheter, and she had had several involuntary evacuations from the bowels. Examination of the spine, beyond revealing considerable tenderness over the upper dorsal region, was negative. She was placed on ergot, iodide and bromide of potassium, with revulsives to the spine over area of tenderness. March 8th: Paralysis of upper extremity rapidly disappearing; incontinence of urine; bromide discontinued. March 9th: Dr. Westlake kindly visited her with me in consultation; paralysis of upper extremity almost disappeared; that of muscles of lower extremities still complete; skin hyperesthetic; commencing bedsore over nates; spine no longer sensitive in dorsal, but quite so in lumbar region; diagnosis concurred in and treatment continued. Since that date her condition remains practically unchanged.

JOHN FIFE, M. D.

Red Bluff, Cal.

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[1] This case was the subject of a paragraph that has been going the rounds of the press to the effect that the woman had been apparently dead for some time, and burial was actually about to take place when signs of life prompted efforts at resuscitation that proved successful.

REPORTS FROM THE HOSPITALS AND ASYLUMS OF THE PACIFIC COAST.

SAN FRANCISCO RECEIVING HOSPITAL.

UNDER THE CARE OF GEO. B. SOMERS, M. D.

Gunshot Wound in Head—Recovery with Bullet in Brain.

On the afternoon of February 8, 1892, two boys, aged respectively 13 and 16 years, were playing—the one with a toy pistol and the other with a parlor rifle, carrying a short, 22-calibre cartridge. When not more than 8 or 10 feet apart, they pointed their weapons at one another and the rifle was discharged, the bullet striking E. C—, the younger, in the forehead, an inch to the right of the median line, and just within the hairy portion of the scalp. He was removed to the City Receiving Hospital, where he was found to be perfectly conscious, suffering but little pain, and exhibiting no brain symptoms. An examination of the wound, however, showed that the bullet had penetrated the skull. The boy was placed under chloroform, and, with the aid of Asst. Police Surgeon Berry, the scalp wound was enlarged and two buttons trephined from the edge of the opening, with the view of giving the brain wound as free drainage as possible. The inner table was found to be fractured for at least a half inch beyond the edge of the opening in the outer table. All fragments of bone were removed and the rough edges smoothed off. During the operation much clotted venous blood, mixed with a considerable quantity of broken-up brain matter, was discharged through the opening in the dura mater. Just how much brain matter came away, it is impossible to say; but it seemed at the time to be as much as two teaspoonfuls. The wound was now explored with a bullet probe, which was allowed to find its way along the passage. After entering about three inches it stopped. The bullet could not be felt by manipulating the probe, and deeming further expedients useless, the wound was prepared for dressing. A gentle stream of water was directed into the canal, and all blood and detritus washed away. A drainage tube was inserted as far as it would go, the wound closed and dressed. The next day the boy's condition was so good that it was deemed safe to remove him to his home. On the third day he was somewhat restless, temperature 101° F., but there was no particular pain or other symptoms. It was thought best to redress the wound and remove all sutures, so as to prevent the possibility of pressure from any accumulating discharges. In a day or so after the sutures were removed, a pulsating meningo-cerebral tumor, covered with bright-red granulations, and about as large as a walnut, gradually formed and protruded from the wound. From this time on the progress of healing was uninterrupted. The granulations gradually receded within the cicatrix, and one month after the accident were no larger than a small pea. Up to this date (March 15) not the slightest mental or physical symptoms had supervened.

DEPARTMENTS.

OBSTETRICS, GYNECOLOGY AND PEDIATRICS.

By WALLACE A. BRIGGS, M. D., Sacramento, Cal., and
HENRY GIBBONS, JR., M.D., Professor of Obstetrics and Diseases of Women, Cooper Medical College, San Francisco, Cal.

Version vs. the Forceps in the Induction of Premature Delivery.—At the Baudelocque Clinic and the Hospital Lariboisière, under the direction of M.

PINARD, the percentage of induced deliveries is 1 in 150, and of the cases operated upon, 99 in 100 leave the hospital convalescent—a greater proportion of recoveries than follows simple parturition, probably due to greater antiseptic precautions. Of the 100 infants, 67 leave the hospital living, and in foreign countries Braun reports 63 per cent. Ahfeld 60, and Leopold 66. After a close investigation of the reasons why the risks of premature delivery are so much greater to the child than to the mother, M. Pinard observes that 6 children died in 50 delivered spontaneously, 4 in 6 extracted by breech, 6 in 14 versions, 7 in 21 delivered by forceps. The superiority of spontaneous delivery is striking, and the forceps yield better results than version. The apparent advantages of version over breech extraction may be due to the fact that we hesitate too long before interfering. There is no doubt that the more rapid the delivery the greater the child's chances of life, but this does not authorize us in risking the life of the mother; and we must not forget that laceration of the cervix alone is sometimes fatal on account of the uterine artery. Prof. Pinard thus sums up the conditions most favorable to the induction of premature delivery. Pregnancy of at least 7 months; pelvis of not less than 9 cm.; delivery natural and as rapid as possible. The question as to whether, when interference is indicated, the forceps are to be preferred to version, seems unanswerable, as these cases must always possess an unknown factor: adaptation. Circumstances—that is to say, the form of the pelvis, the ossification and inclination of the cranium, the operator, the fetal vitality, the direction and power of the expulsive forces—permit us, in some cases, to save a child by version that would have died if delivered by the forceps, and in other cases to preserve a life by the forceps that would have been sacrificed by version. Simpson, who wrote the first memoir upon the subject, held that in cases of contracted pelvis, the head passes more easily last, than first, and that the fetus may be represented by an A, of which the transverse bar stands for the irreducible base of the cranium, and the limbs for the parietals. When the fetus is delivered by the feet, the point of the A descends first, and when the base crosses the strait, the limbs of the A approach each other, and the strain is diminished by the diminution of the biparietal diameter with the overlapping of the bones. If, on the contrary, the head is presented, the limbs of the A must pass first, and instead of coming together they separate and are flattened against the pelvic crown. This ingenious, but erroneous theory, was opposed by Joulin, who compared the vertex to a cone, rather than to the limbs of the letter A, and affirmed that it was reduced by pressure of the superior strait, rather than flattened against it. In his opinion, the bitemporal diameter enters the contracted inlet in any case, and consequently version is less favorable than the forceps to the preservation of fetal life, except when the pelvis is unsymmetric, in which case version is preferable if it allows the head to enter the larger half. Barnes, in his work on "Obstetrical Operations," writes that, in a pelvis deformed by rachitis, the head rests upon the lumbar vertebræ, and its anterior part enters the excavation by describing a curve. Given a pelvis of less than 76 millimetres, and version is the necessary complement of induced delivery, but with a pelvis of more than 76 millimetres, the forceps achieve equally good results. Budin, by a series of experiments, reaches the same conclusions that Barnes attains empirically: at term, the two operations are equivalent; before term, version is preferable. Champétier does not compare the merits of the two operations, but in those cases in which version is practised, he thinks the extraction of the fetus may be facilitated by: (1) Pushing back into the concavity of the sacrum that side of the base of the neck which is behind the symphysis pubis. (2) Pressure upon the frontal region of the fetus in line with the superior strait. Although foreign obstetricians generally prefer version, French physicians incline toward the forceps, and the question seems insoluble, because so much depends upon the way the forceps are applied. If applied obliquely or transversely, they may not only prevent a diminution of the biparietal diameter, but, worse still, may render the head immovable and impede flexion. Pinard advocates placing one blade upon the promontory or the extremity of the sacrum, and the other behind the pubis, or in its immediate neighborhood, as the cephalic sphere is transverse or slightly oblique. The proper seizure of the cephalic mass is of capital importance, but it may be impossible, even to the most skilful, as other influences are at work that can only be expressed by the word adaptation. This is the unknown factor of the problem, and whether it is favored or impeded by the forceps or by version, is the whole insoluble question. We only know that, other things being equal, a child that is delivered by the head, has a better chance of life than one that enters the world feet foremost. This is the reason that the forceps are to be preferred to version; but however well constructed or well managed, they retain their inferiority as a rigid instrument, unfitted for any but vulvar application, and if the risks of delivery by the feet could be overcome to the child as they have been to the mother, version would quickly become their formidable and victorious rival.—*Union Médicale*, December 2, 1891.

SURGERY.

By T. W. HUNTINGTON, B. A., M. D., Surgeon Southern Pacific Company's Hospital, Sacramento, Cal.,
J. F. MORSE, M. D., Surgeon German Hospital, San Francisco, Cal., and
G. F. SHIELS, M. D., C. M., F. R. C. S. E., Surgeon Polyclinic, San Francisco, Cal.

Fracture of the Sternum.—DR. SIDNEY R. WEBB reports a case where the fracture was located at the line of union between the third and fourth segments of the gladiolus. The exciting cause was direct violence, the patient being struck in the breast with a poker. The fracture was reduced by placing a pillow in the small of the back, thus providing a certain amount of extension, and gently manipulating. The chest was then strapped, as in treatment of a fractured rib, and a bandage afterward firmly applied. The patient was kept in bed for a fortnight. The result, with the exception of a small prominence along the line of fracture, was perfectly good.—*British Medical Journal*, January 16, 1892.

Metatarso-tarsal Dislocation.—DR. GEORGE HARDYMAN describes a case of this injury that came under his care. The patient, a child of 7 years, was brought to the infirmary, complaining that a vehicle had run over her foot. Examination showed a mark of bruising on the back of the leg, midway between the lower end of the calf and the ankle joint, the foot having been doubled upon itself in the antero-posterior direction. There were also on the dorsum of the foot, in the metatarso-tarsal region, two swellings in the region of that joint, which proved to be a dislocation of the first, third and fourth metatarsals on the dorsum of the tarsal bones. The facets were easily distinguishable. The second and fifth metatarsals were not dislocated, dislocation of the second metatarsal being saved from the peculiarly strong position of that joint. The third metatarsal was inclined abnormally outwards. There was no crepitus. Under chloroform each metatarsal was reduced separately, the method being pressure with the thumb downwards with extension. The fourth metatarsal required a pad to keep it in position, after reduction of the dislocation, on account of the wedge-like form of its proximal extremity antero-posteriorly.—*British Medical Journal*, February 6, 1892.

OPHTHALMOLOGY, OTOLOGY AND LARYNGOLOGY.

By WM. ELLERY BRIGGS, M. D., Sacramento, Cal.

The Effect of Electric Light Upon the Eye.—By analysis and comparison of the constituents of the different forms of light used, GUSTAVUS HARTRIDGE concludes that the incandescent light is most servicable for indoor and the arc light for outdoor illumination—the latter on account of its intense brilliancy. Sunlight is the natural illuminator, and its rays are best adapted to the retina, which makes it our standard for artificial lights. It has been proved that the rays belonging to the red end of the spectrum are of longer wave length, and are more irritating to the retina. Light is good or bad, then, according to the number of such rays it contains. Sunlight contains the fewest number, and the electric light comes next. Common gas light contains most, and parafine occupies an intermediate position. Other sources of irritation to the eyes are heat and a vitiated atmosphere, as by combustion. The electric light gives that desideratum, the maximum of illumination with the minimum of heat, and no products of combustion. Of the many reported cases of injury to the eyes by the sun and artificial light, very few have been authenticated. As yet there is no positive evidence of injury to the eyes caused by the incandescent light. Such accidents, when they did occur, were the results of excessive and injudicious use of the eyes, as may be brought about by gazing at the sun during an eclipse, or by experimenting electricians. Snow blindness is another example of the same. It has also been found that eyes which were optically defective were the first to become affected by light, nor is this strange, for such eyes are the first to fail under all immoderate usage. Other important considerations regarding light and the eyes, are the intensity of the light and its position. The arc light for outside use should be situated high up, and should be shaded. This will produce a diffused and soft illumination. All lights should be of sufficient intensity that when shaded there will remain proper illumination. Finally, the electric light possesses natural and other advantages which make it the illuminator *par excellence* of artificial lights.—*British Medical Journal*, February 20, 1892.

DERMATOLOGY, SYPHILIS AND VENEREAL DISEASES.

By G. L. SIMMONS, JR., M. D., Sacramento, Cal.

Syphilis Among the Ancient Babylonians and Assyrians.—PROKSCH (*Monatschrift f. prakt. Dermatol.* No. xii, 1891) asserts that in the papyri from the library of Sardanapalus, dating back seven hundred years before Christ, he has found proof of the existence of syphilis among the Babylonians and Assyrians. In the legend of Idzduber, both his heroes were punished with a disease which affected the skin and generative organs. One of the heroes, after unnatural sexual enjoyment, sickened and died.

Extragenital Chancres.—VESLIN, in the past year, has observed 26 cases of extragenital chancres. Seventeen of these are on the head, and the remaining 9 on the breasts, anal region and extremities. Of the 17 on the head, 9 were

located on the under lip and but 3 on the tongue and upper lip. Feulard has seen 39 cases, and agrees as to the majority being on the head. Of his cases 25 were on the face, and the remaining 14 on the extremities, breasts and anal regions.—*Annal de Dermatologie et de Syphilographie.*

MATERIA MEDICA AND THERAPEUTICS.

By WM. WATT KERR, M. A., M. B., C. M., Professor of Clinical Medicine, University of California, San Francisco.

Strychnine and Oxygen in Pneumonia.—Influenced by the number of deaths from pneumonia at the present time, DR. LAUDER BRUNTON and DR. PRICKETT have published the results of their experience with oxygen and strychnine in pneumonia at an earlier period than was their original intention; and although a more prolonged series of observations is desirable, the following abstract of their report indicates a field of clinical investigation that is open to every practitioner. It is self-evident that if we can increase the oxygenating power of the air inhaled by patients in cases where the breathing surface of the lungs is diminished, we may afford great benefit, and, in some cases, save life. More especially is this likely to be useful where the interference with respiration is of a temporary character, as in cases of acute pneumonia. In some such cases, where one lung, or one part of a lung, is clearing up, while another part is becoming involved, the question of life or death will be decided by the amount of lung available for respiration. This, again, will depend on the comparative rate with which the inflammation encroaches upon the breathing space on the one hand and the already consolidated lung clears up on the other. It is possible that an increased oxygenating power of the respired air, for even a few hours, may sometimes turn the scale in such cases. The following case, unfortunately, was not finally successful, but the immediate effect of inhalation of oxygen was so remarkable as to awaken the greatest hope of future success: A clergyman, aged 40, was attacked with influenza, and pneumonia of the right base. On Saturday, June 20th, this condition was beginning to clear up, but consolidation began to make its appearance at the left base. On June 21st he had become completely unconscious and apparently moribund, so that there did not appear to be the slightest possibility of doing him good, even temporarily, but about 15 ounces of blood were removed by venesection, and a subcutaneous injection of strychnine ($\frac{1}{40}$ gr.) was given and repeated in 20 minutes, with the hope of stimulating the respiratory movements. These measures had very little effect, and it was decided to try inhalations of oxygen. In about 15 minutes the patient's color became less livid, though he was still completely unconscious; and two hours later he was perfectly conscious, his color quite healthy, and he expressed himself as feeling comfortable and well. The improvement, however, was only temporary.—*British Medical Journal*, January 23, 1892.

MEDICINE AND PATHOLOGY.

By ALBERT ABRAMS, M. D., Demonstrator of Pathology, and Adjunct to the Chair of Clinical Medicine, Cooper Medical College, San Francisco, Cal.

The Etiology of Diabetes.—DR. SCHMITZ has observed 2,500 cases of this disease. He distinguishes between idiopathic diabetes and mellituria occurring as an attendant of other diseases. The development of idiopathic diabetes is, in his opinion, always dependent upon a diabetic predisposition. Of his patients, 1,206 were males, and 909 females. It is a rare disease in childhood, but after the age of 20 it increases gradually with each decade. It is rare among the inhabitants of certain regions. The frequency of the disease in Malta and

Italy is attributed by Cantani to the great consumption of sugar by the inhabitants of those countries. The diabetic tendency is usually congenital, and often directly inherited. In 998 cases it was established that near relatives had suffered from diabetes. Twelve cases had occurred in one family. In 428 cases, hereditary mental disturbances were observed. Insanity was noted in the families of 263 patients. The excessive use of sugar is injurious to diabetics, and the amount of sugar in the urine varies directly with the amount eaten. In 641 of his cases, diabetes was preceded by a free use of sugar extending over a considerable period. He insists, however, that in each case the diabetic predisposition must have been present, or otherwise the disease would not have developed. The author lived for several years in this country, and was struck by the very great amount of sweets eaten by the inhabitants; and yet diabetes is not frequently observed here. From this fact he concludes that Americans must have no predisposition to the disease. Nervous shocks are usually accepted as causes of diabetes, a view which our author does not entertain. He does not doubt that diabetes can be communicated from one person to another, and cites seven different instances where he has observed the disease in man and wife. He suggests that the disease may be cause by microörganisms. Mellituria or symptomatic diabetes, when of very long standing, produces the same injurious effects upon the body as idiopathic diabetes. Mellituria was observed in the following diseases: tuberculosis, carcinoma, valvular cardiac lesions, cerebral syphilis, morphinomania, affections of the spinal cord, affections of the liver, and Addison's disease. The author is convinced that diseases of the pancreas will cause mellituria.—*Berliner klin. Wochenschrift.*

MENTAL DISEASES AND MEDICAL JURISPRUDENCE.

By A. W. HOISHOLT, M. D., Assistant Physician, State Asylum for Insane, Stockton, Cal.

Precocious Wickedness.—A short time ago an investigation in England developed one of the most remarkable cases of precocious wickedness on record. Two boys, aged respectively 8 and 9 years, were arraigned before a magistrate for drowning another lad, who was 8 years old. The two boys, who had the reputation of being vicious children, plotted together to take the clothing of the first well-dressed boy they met. They induced their victim to go with them and take a swim. The pond where they took him was 12 feet deep in some places; getting a raft and paddling it to one of these places they pushed him into the water, and for a long time prevented him from getting on the raft again, although he made frantic efforts to save himself. After awhile they pulled him up and towing the raft to where it was a little deeper, pushed him off again. He pleaded hard for his life, but they had no mercy; his strength soon giving out he sank under the water. The two boys then conveyed the body to the shore and beat it until they were sure it was dead. Watching the body for a considerable time, and seeing no sign of life, they divided the clothing and went home. When the boys were arrested, shortly afterwards, they confessed all the horrible details without apparent feeling. This case is so extraordinary as to baffle all criminal procedure, and to make uncertain what course to pursue. It does not seem possible that boys of such a tender age could, under any circumstances, be executed for murder, and still the wickedness of the crime could hardly be exceeded by that of crimes committed by men of mature age.—*North American Practitioner*, December, 1891.

Condition of the Blood in the Insane.—DR. WINCKLER has examined 21 cases of different forms of insanity with regard to the number of red corpuscles and amount of hemoglobin present in the blood, and finds the latter much lower than in health, although the former are not as a rule diminished. The proportion is lowest in depressive forms of insanity. Paroxysms, whether of mania or melancholia, produce a diminution both of the number of corpuscles and of hemoglobin, which improved, however, with the subsidence of the attack. Both conditions improve also during convalescence with the increase in weight. The onset of terminal dementia, on the other hand, is associated with a progressive deterioration of the blood, notwithstanding the gain in weight. Dr. Smyth, of the Kent County Asylum, has investigated 137 cases as to these conditions, and has come to somewhat similar conclusions. He finds, in all forms of insanity, a moderate diminution of the number of red corpuscles—from 8 to 20 per cent.—with a very much greater loss of hemoglobin of 26 to 42 per cent.; the latter percentage in secondary dementia, which also gives the lowest proportion of red corpuscles. The specific gravity of the blood, on the contrary, is increased in all forms, and most so in secondary dementia.—*American Journal of Insanity*, January, 1892.

FORMULÆ.

By GEO. B. SOMERS, M. D., San Francisco, Cal.

Alterative Mixture.—DR. R. A. MCLEAN, San Francisco, in hospital and clinical cases, prescribes the following as a standard alterative mixture:

Bichloride of mercury	gr. vi
Iodide of potash	℥i
Liq. potasii arsenitis	ʒvi
Fluid extract of senna	℥ii
Syr. of ginger	℥iv
Water ad.	℥xii

S.—Teaspoonful three times a day.

Peroxide of Hydrogen.—RICHARDSON, in his *Asclepiad*, recommends a number of formulæ for the internal administration of this drug, from which the following are selected:

(1) *Astringent and Oxygen Mixture.*

Hydrogen peroxide	℥iiss
Acid. sulph. dil.	ʒiss
Glycerin.	℥iss
Aq. destill. ad.	℥vi

S.—One ounce as directed. Each dose should be diluted with cold water.

(2) *In Hemoptysis.*

Hydrogen peroxide	℥iiss
Tannin	ʒiss
Glycerin.	ʒvi
Aq. destill. ad.	℥vi

S.—One ounce diluted in cold water.

(3) *For Bronchitis and Phthisis, with sleeplessness and much expectoration.*

Hydrogen peroxide	℥iiss
Liq. morph. hydrochl.	ʒi
Syr. tolutan.	ʒvi
Glycerinum	℥iiss
Aq. destill. ad.	℥vi

S.—One ounce diluted in cold water.

(4) *Tonic.*

Hydrogen peroxide	℥iiss
Ac. phos. dil.	ʒi
Syr. ferri phos.	ʒvi
Glycerinum	℥i
Aq. destill. ad.	℥vi

S.—An ounce diluted with cold water.

(5) *Antiseptic, Deodorant and Antispasmodic Mixture for the Stomach.*

Hydrogen peroxide	℥iiss
Spr. vini. rect.	℥iii
Oleum creasoti	mvi
Glycerinum purum	ʒvi
Aqua destellata ad.	℥vi

S.—One ounce diluted with cold water.

(6) *Gargle.*

Tannin pure------------gr. x
Glycerinum purum----℥i
Spr. vini. rect.-----------ʒiv
Distilled water --------℥iv
Hydrog. perox. qs. ad. ℥viii

S.—Use as a gargle.

Brandy with Egg.—To administer brandy to infants ELROY recommends the following:

Brandy-----------------℥i
Cherry laurel water---gtt v
Yolk of egg ------------No. ii
Powdered sugar--------ʒvi

S.—To be given in the course of the day a teaspoonful at a time.—*Annals of Gynecology and Pediatry.*

Antisepsis of the Hands.—At Johns-Hopkins Hospital DR. WELCH and the surgical staff have, by experiments, found permanganate of potash superior to bichloride of mercury for disinfecting the hands. The stain of the permanganate is avoided by the use of hyposulphite of soda and oxalic acid, as follows:

(1) Immerse the hands for two minutes in

Permangan. of potash, 5 parts
Water-----------------100 parts

(2) Rinse the hands and then immerse in

Hyposulphite of soda-℥i i
Water-----------------Oi

(3) While immersing the hands in No. 2 solution add to it

Oxalic acid------------℥ss
Water-----------------Oi

—*New York Journal of Gynecology and Obstetrics.*

PUBLIC HEALTH.

By W. R. CLUNESS, M.A., M.D., Sacramento, Cal.

Mortality.—The deaths registered in 118 town districts of the State during the past month, in a population of 812,877, correspond to an annual rate of 17.64 a thousand, the total mortality having been 1,200. 117 deaths were due to zymotic diseases, giving an annual rate of 1.71 a thousand. Of these, 42 were due to diphtheria, 3 to cholera infantum, 18 to typhoid fever, 2 to diarrhea and dysentery, 10 to cerebro-spinal fever, 6 to whooping cough, 9 to croup, 14 to measles, and no deaths to remittent or intermittent fevers. 370 deaths resulted from diseases of the respiratory organs, giving an annual rate of 4.46 a thousand. Of these, 189 were due to consumption, 112 to pneumonia, 57 to acute bronchitis, and 12 to pulmonary congestion, the rate being for consumption and pneumonia 2.78 and 4.18, respectively. 65 deaths resulted from diseases of the heart. The average annual death rate from all causes, occurring in the ten largest cities and towns in the State, and representing a population of 500,000 was 21.72 a thousand. The highest rate for the month occurring in cities having a population of 10,000 or more inhabitants, was reported from San Jose, the lowest from San Diego.

METEOROLOGY.

By J. W. ROBERTSON, B.A., M.D., San Francisco, Cal.

Summary for February.—*Temperature.*—Throughout the whole coast and valley belt the weather was mild, the mean average temperature of the month ranging from 50 to 55°.

Rainfall.—According to the Signal Service reports, rain fell on 12 days in the northern and 10 in the southern portion of the State, leaving a seasonal deficiency ranging from 7 inches at Red Bluff, to 4 at Sacramento, 5 inches at San Francisco, 6 at Los Angeles, and only 2 inches at San Diego.

California—Tabular Statement for February, 1892.

STATIONS.	Temperature.						Rainfall.		Mean Relative Humidity	Weather.			Wind.	Furnished by—
	Mean	Highest	Lowest	Mean Highest	Mean Lowest	Mean Daily Range	No of Days Rain Fell	Total Rainfall		No. of Clear Days	No. of Fair Days	No. of Cloudy Days	Prevailing Direction.	
Auburn ....Cal.	52.2	70.0	35.0	----	----	----	----	4.91	----	----	----	----	S.E.	Southern Pacific Company.
Berkeley......... "	50.9	65.9	38.5	60.9	45.7	15.2	10	4.20	85.0	7	4	11	S.W.	Obs. University of California.
Colfax........... "	46.0	66.0	30.0	----	----	----	----	7.55	----	----	----	----	S.W.	Southern Pacific Company.
Eureka.......... "	47.9	59.0	36.0	53.2	42.5	10.7	13	2.53	93.0	3	12	14	N.	Weather Bureau Dept. Agr.
Fresno.......... "	53.2	70.0	34.0	63.5	43.0	20.5	5	1.00	72.0	8	15	6	N.W.	" " "
Keeler. .... "	46.6	67.0	23.0	55.1	38.0	17.1	5	0.19	56.0	8	11	10	S.W.	" " "
Los Angeles.... "	54.0	74.0	37.0	62.6	46.3	16.3	11	3.19	80.0	6	10	13	W.	" " "
Monterey .... "	53.5	66.0	30.0	----	----	----	----	1.50	----	----	----	----	S.	Southern Pacific Company.
Napa............ "	47.7	64.0	32.0	57.4	41.4	16.0	8	3.43	78.0	8	12	9	N. & S.	Station Napa Insane Asylum.
Oakland......... "	50.0	72.0	36.0	61.2	44.9	16.3	9	3.68	88.0	7	8	14	N.W.	Chabot Observatory.
Paso Robles.... "	49.5	69.0	29.0	----	----	----	----	1.39	----	----	----	----	S.	Southern Pacific Company.
Red Bluff....... "	53.0	77.0	30.0	----	----	----	9	3.11	75.0	10	13	6	N.W.	Weather Bureau Dept. Agr.
Sacramento. ... "	52.2	70.0	32.0	61.3	43.2	18.1	7	2.84	75.0	11	13	5	S.W.	" " "
San Bernardino "	53.4	77.0	31.0	64.1	42.8	21.3	8	3.30	78.0	13	4	12	W.	A. K. Johnson, M. D
San Diego....... "	55.1	68.0	42.0	61.2	49.0	12.2	10	2.96	80.0	9	7	13	W.	Weather Bureau Dept. Agr.
San Francisco.. "	52.4	66.0	42.0	57.4	47.3	10.1	9	2.90	82.0	9	8	12	W.	" " "
Santa Barbara.. "	53.7	71.0	38.0	60.6	46.8	13.8	9	2.55	80.0	4	8	17	E.	Hugh D. Vail.
Santa Cruz...... "	52.6	66.0	37.0	----	----	----	----	4.79	----	----	----	----	N.	W. R. Springer.
Yuma..........A. T.	59.0	84.0	38.0	70.6	48.2	22.4	6	0.87	57.0	18	10	8	N.	Weather Bureau Dept. Agr.

Blank (----) indicates data missing.

Occidental Medical Times

COMMUNICATIONS are invited from all parts of the world. When necessary to elucidate the text, illustrations will be furnished without cost to the author.

SACRAMENTO: APRIL, 1892

IS CRIME A NEUROSIS?

The case of WM. MCKENNA, the 10-year-old San Francisco boy, whose expertness and persistency in thieving compelled his guardians to send him to the Reform School at Whittier, calls attention to the often raised question whether crime is not a neurosis. The opinion is held by many psychologists that the instinctive criminals are frequently the descendants of the epileptic, the drunken, or of those actually insane or strongly possessing the insane diathesis, and are so branded in every feature. The facial characteristics especially insisted upon are the prognathous or receding jaw, irregular and protruding teeth, nose deformed either by deflected septum or deficiency of bone, eyes small and close together, forehead receding, narrow ears prominent and deformed by atavistic characteristics, hair coarse and bristling and a scanty beard. The skull often presents certain abnormalities, especially in the posterior half, the characteristic type being the oxycephalic or sugar-loaf crown. It is also asserted that an examination of the brain shows a deficiency both in the shape and the arrangement of the convolutions.

That many criminals are morally insane is conceded by all alienists. JESSIE POMEROY, the boy murderer, the girl, quoted by HAVELOCK ELLIS who killed a younger playmate for the purpose of securing the ear-rings which she hoped to exchange for candy, the 8 and 9 year old murderers [*vide* p 203], and the case, published within the last month, of the little negro boy who, in mere wantonness, stabbed a baby to death, and was found a few minutes later playing in the garden with the still bloody weapon, are types of this class. They are intellectually sane, but are so bereft of all conscience, all morality, all instinctive knowledge of what is intrinsically right and wrong, that writers agree in calling them "moral idiots." As a rule, these instinctive criminals belong to the class of murderers or petty larcenists, but many are simply destructive and mischievous, as is the case of the so-called pyromaniacs.

But granting that these criminals are by nature and heredity so morally obtuse that they cannot be judged by the standard of morality usually recognized, it by no means follows that they are irresponsible and should not be punished. The community must be protected, and the laws, especially in California, have been so framed that moral insanity cannot be pleaded in extenuation of crime.

Early training, and proper teaching and association, may do much toward correcting this tendency to evil, but so far, at least in California, all attempts have utterly failed. The Industrial School, originally intended for the reclamation of the youth, their education to habits of industry and to the acquirement of trades, became such a hot-bed of vice, and so notorious a training school for San Quentin, that it was suppressed. The school at Whittier, under the direction of a well-known physician and an enthusiastic worker in the associated charities, will undoubtedly accomplish some good, but where the moral sense is absent it seems that the prison becomes, sooner or later, their permanent home.

THE STATE SOCIETY.

The twenty-second annual meeting of the State Society will be held in Union Square Hall, Post street, San Francisco, April 19, 20, 21 and 23. Circulars have been issued to members of the State Society only, but any physician who is in good standing with his local Society, and who has resided in the State for six months, is eligible for membership. Applicants should communicate with **DR. J. H. WYTHE**, of Oakland, the Chairman of the Board of Censors, and forward the sum of $7 ($2 initiation fee and $5 annual dues). Reduced transportation rates will be found in another column.

In making up the programme the Committee of Arrangements have taken a new departure, though it is one that has often been discussed in the past. There will be no evening sessions. The morning session will commence at 9:30 and end at 12. The afternoon session will commence an 1:30 and close at 6. This really means as much time for scientific work as under the old plan, and it remains to be seen whether the longer sessions will be as agreeable to members. Formerly a great deal of time was lost by want of punctuality. The sessions were rarely called to order until after the appointed hour, and invariably ran beyond the allotted time. The regular order of business was broken up and papers postponed to other sessions. The meeting of 1891 was, perhaps, the first occasion on which all business on the programme was completed, and in which the sessional work was finished before adjournment. All papers in the hands of the Secretary were duly read and open for discussion, so that no contributor could feel that his labor had been lost.

On the present occasion every committee but one will make a report, and the number of voluntary papers is also quite large. This means constant work for the officers of the Society if the programme is to be properly carried out. Promptness in assembling and punctuality on the part of those who are to read papers will be more than ever essential. We are pleased to observe that the stereotyped committee report is being abandoned, and has given place to an address or paper that will be far more profitable to the Society. THE MEDICAL TIMES has persistently urged this reform, and will continue to advocate it until the "committee report" is no longer inflicted upon the Society.

The following are the social features of the meeting: Tuesday evening, the 19th, free tickets will be provided for all who desire to attend the Alcazar theatre. Thursday evening, the 21st, there will be a reception at B'nai B'rith Hall by the local Medical Societies. Tuesday afternoon MRS. O. O. BURGESS will give a reception to the ladies at her residence, 329 Geary street, from 3 to 5 o'clock. Wednesday morning the ladies will be shown the United States Mint, the Academy of Sciences, and the State Mining Bureau. At 3:30 P. M., they will take the steamer "General McDowell," at the Washington street wharf, for a cruise to points of interest about the bay. Thursday morning MR. SUTRO will entertain the ladies at lunch at Sutro Heights.

NOTES.

DR. W. WATT KERR, accompanied by his wife, left for a six months' visit to Europe on March 19th.

The Exhibition.

The usual exhibition of drugs, surgical instruments and appliances will be held in connection with the meeting. So far the following firms have signified their intention of being represented, though as the time arrives no doubt others will be present: C. E. Worden & Co., Chas. H. Phillips Chemical Co., Horlick's Food Co., Mount Shasta Mineral Springs Co., Reed & Carnrick.

Rates and Fares.

The following reductions in transportation rates are available to visiting physicians and their families: The Southern Pacific Co. will give a rate of one and one-third fare, round trip. Passengers must take receipt of agent and preserve same, to be countersigned by the Secretary at the meeting, and upon presentation to ticket agent at San Francisco a return ticket; will be sold for one-third fare. Tickets can be purchased at any time before the meeting, and are good until forty-eight hours after adjournment, or until evening of Sunday, April 24th. The necessary blank forms for railroad certificates have been forwarded to members. It is important that everyone paying fare should obtain a certificate, as the reduction, while trivial in some cases, is quite important to those coming from a distance, and it is given only on condition that 75 tickets have been sold. The Pacific Coast Steamship Co. have informed us that they will give a one and one-half fare rate, which will include board. Passengers will take a receipt from the Company's Agent at port of departure, which must be endorsed by the Secretary of the Society. The Committee of Arrangements states that the reductions offered by the hotels have been so small that it has been decided not to recommend any.

Voluntary Papers.

The following are the titles of voluntary papers, with the names of their authors, which have, so far, been received: "What is Needed to Render our Therapeutic Use of the Mineral Waters of California More General and More Practical," by H. M. Pond, St. Helena; "Pulmonary Atelectasis as a Cause of Anemia," by A. Abrams, San Francisco; "A New Method of Removing the Uterus for Cancer," by J. H. Wythe, Oakland; "Criminal Abortion," by W. W. Macfarlane, Woodland; "Suggestions on Hygiene and Sanitation," by M. M. Chipman, San Jose; "A Case of Polypoid Growth from the Vault of the Pharynx, and Some Practical Facts on the Treatment of Hypertrophic Rhinitis," by A. C. Rogers, Los Angeles; "Nasal Surgery and the Value of Various Operations on the Antrum of Highmore and Sinus Frontalis," by H. L. Wagner, San Francisco; "Is Jequirity a Safe Remedy? Yes," by W. D. Babcock, Los Angeles; "Experimental Researches on the Opacities of the Cornea after Cataract Operations," by H. L. Wagner, San Francisco; "The Explosive Neuroses," by G. B. Richmond, Salinas; "A Few Remarks on the Surgery of the Skull," by George F. Shiels, San Francisco; "A Case of Colles' Fracture," by E. H. Woolsey, Oakland; "A Few Surgical Reminiscenses," by W. J. G. Dawson, St. Helena; "A Case of Surgery of the Liver," by Dudley Tait, San Francisco; "Diphtheritic Paralysis in Children," by F. W. D'Evelyn, San Francisco; "Some Points in the Treatment of Obstruction of the Bowels, and of Retention of Urine," by C. W. Natting, Etna Mills; "Report on Pharmacy," by A. McG. Stuart, Santa Rosa; "On the Use of Fluorescin in Diseases of the Cornea," by K. Pischl, San Francisco; "The Topographical Anatomy and the Physiology of the Internal Capsule, with Reference to Determining the Course of Gunshot Wounds of the Brain," by E. R. Merrill, Sacramento; "On Diseases of the Mastoid Process," by E. S. Clark, San Francisco.

The Discussions.

The following are the Standing Committees, with the names of the Chairmen, and of the members who have been appointed to open the discussion in each Section. Wherever obtainable, the title of the paper is also given: Clinical Medicine, J. H. Utley, Los Angeles, "The Diagnosis and Treatment of Incipient Phthisis;" W. S. Thorne, San Francisco. Surgery, W. Le Moyne Wills, Los Angeles, "The Surgery of the Lungs;" R. A. McLean, San Francisco. Obstetrics, G. P. Reynolds, Alameda; L. M. F. Wanzer, San Francisco. Gynecology, W. A. Briggs, Sacramento, "Metritis and Endometritis;" L. Robinson, San Francisco. Diseases of Children, A. H. Pratt, Oakland; F. W. D'Evelyn, San Francisco. Ophthalmology and Otology, A. F. Darling, Los Angeles; A. Barkan, San Francisco. Laryngology and Rhinology, Thos. F. Rumbold, San Francisco, "The Anatomy of the Nose;" W. D. Babcock, Los Angeles. Diseases of the Mind and Nervous System, A. M. Gardner, Napa, "Better Facilities for the Treatment of the Convalescing Insane;" J. W. Robertson, San Francisco. Dermatology and Venereal Diseases, G. J. Bucknall, Los Angeles; J. F. Morse, San Francisco. State Medicine, Thomas Ross, Woodland; Jas. Simpson, San Francisco. Medical Topography, J. P. Widney, Los Angeles; G. W. Westlake, Red Bluff. Indigenous Botany, W. P. Gibbons, Alameda; M. M. Chipman, San Jose. Medical Jurisprudence, J. P. Boyd, Santa Ana, "Medical Expert Evidence;" George F. Shiels, San Francisco. Histology and Microscopy, A. W. Hoisholt, Stockton, "Plasmodium Malariæ;" J. H. Wythe, Oakland. Anatomy and Physiology, J. H. Barbat, San Francisco [no report]. Pathology, D. C. Barber, Los Angeles, "A Resume of the Results of Pathological Investigation for the Past Year;" J. C. Spencer, San Francisco.

Improvement in the Sectional Work of the American Medical Association.

The committee appointed at the last meeting of the American Medical Association to consider the best means for promoting the prosperity of the sections of the Association, will hold an adjourned meeting in the Hotel Cadilac, Detroit, Mich., June 6th, at 3 P. M. Members of the committee are requested to notify the Chairman of their intention to be present at this meeting. The committee would esteem it a favor if each member of the Association would communicate, in writing, his, or her, views concerning the best measures for promoting the development of the sections. Such communications may be sent to the Chairman of the committee, John S. Marshall, 9 Jackson street, Chicago, Ill.

The National Popular Review.

"Commencing July 1, 1892, it is proposed to publish simultaneously in New York, Boston, Philadelphia, Chicago, St. Louis, Atlanta, Kansas City, Denver, San Francisco, Los Angeles and San Diego, a monthly journal, which shall fully cover the ground implied in the above title." This introduction to the prospectus of the *Review* is certainly the outline of a very large and a very extensive undertaking. Mr. J. Harrison White, best known to the profession of the United States as former business manager of the *Journal of the American Medical Association*, is the moving spirit of the new enterprise, and will be manager and publisher. The editor will be Dr. P. C. Remondino, of San Diego. The style, size of page, and general typographical appearance is to be "almost identical with that of the *Century*," and the subscription price will be $2.00 per annum. Mr. White is a very energetic worker, and in this undertaking he certainly has a wide field, and full scope for his executive ability.

A Warning.

Some time since canvassers were actively working this State in the interest of an illustrated paper known as *Once a Week*. Various inducements were offered to subscribers, amongst which were the gratuitous issue of "Complete Novels," abominably printed on the cheapest paper. The patronage of physicians was made a feature, the desirability of the periodical for use in the waiting room being strongly urged, and no doubt many subscribed. The agreement signed, with one dollar deposit, was binding in every particular. Collections for the balance were made in due course, and when ordered discontinued a notice was sent from San Francisco, stating that a further balance was due, and that the subscription was in force and would continue so until all arrears were paid. This plan was pursued in one instance under our immediate cognizance, and was doubtless carried out in many others. In taking this course the publishers are entirely within their legal rights, and can enforce payment, if they desire. Physicians are proverbially careless in these matters, and to avoid trouble and annoyance we would urge that they discontinue their subscriptions and procure the publication, if desired, through some news agent, as by doing so no complications can arise.

Dislocation of the Cervical Vertebræ.

On March 16, 1892, a young man named Stephen Cuneo, 20 years of age, while engaged in carpenter work on a building in San Francisco, made a misstep and fell from a scaffold a distance of fifteen or twenty feet, striking on a stone pavement. Spectators ran to his assistance and found him conscious, though unable to move. He requested those who assisted him to handle him carefully, saying that he thought his neck was broken. He was removed in a patrol wagon to the City Receiving Hospital, where an examination by Assistant Police Surgeon W. L. Berry revealed the fact that he was suffering from a dislocation of some of the cervical vertebræ. It was also believed that a fracture of one or more vertebræ was present, for crepitus was felt on moving the head. By placing the index finger in the mouth, a large tumor could be distinguished, completely filling the pharynx. This tumor, due to a forward luxation of the vertebræ, caused considerable dyspnea, and at one time even threatened asphyxia. Complete motor and partial sensory paralysis existed over the whole of the body below the neck. Priapism was noticed. Consciousness seemed unaffected for the first six or eight hours, but thereafter was gradually lost. The injury was dressed by binding a padded board against the man's back and allowing it to extend a foot or so above the head. Extension was made by means of bandages running under the chin and occiput, and fastened over the end of the board. The nape of the neck was supported by a sand-bag. The dressing was made in this manner for the purpose of transferring the patient to his home. It was afterwards changed, and Sayre's chin-piece, with weight and pulley, substituted. The patient lived about fourteen hours. A *post-mortem* examination showed that no fracture existed, but that the fourth and fifth cervical vertebræ were dislocated. The cord at the site of the injury was severed half-way through its diameter.

St. Mary's Hospital, San Francisco.

This Hospital, which was established by the Sisters of Mercy in 1857, has for many years carried on a useful work amongst the sick, which have come to it from all parts of the coast. It has numbered amongst its medical officers some of the most prominent men in the State. Recently improvements, amounting to upwards of $100,000, have been made, and a large, 4-story brick wing has been added to the original structure. The first floor comprises the medical officers' rooms, the parlors and reception rooms, the kitchen, dining and billiard room. The three principal floors are each 205 feet long, with a corridor 10 feet running the full length, lighted by triple windows at each end. The wards are 18 in number, with a maximum capacity of 12 beds, well lighted and ventilated. In addition to this there are 36 private rooms, double and single, handsomely furnished and otherwise well appointed. The sanitary arrangements have been carried out according to the latest improvements in hospital architecture, and nothing has been omitted that could promote the cleanliness, comfort and well-being of the patients. The walls and floors of the closets, bath room and lavatories are tiled and provided with marble basins, porcelain tubs, etc. The entire building is heated by steam radiators and lighted by electricity. The operating rooms are four in number, situated in the Mansard story, and completely isolated. Patients are conveyed to them by an elevator. Two of these rooms are tiled, floors, walls and ceilings, rendering it possible to keep their atmosphere in a perfectly aseptic state. The operating tables and requisites of these rooms are of the latest and most approved pattern. The ophthalmic room and the general operating room are fitted up with all the latest conveniences. St. Mary's Hospital, with all these improvements, now ranks among the best hospitals in the country, and is, we believe, the only one on the Pacific Coast that boasts of an operating room that can be rendered aseptic.

An Association of Pacific Coast Rhinologists, Laryngologists, and Aurists.

Dr. T. F. Rumbold, of San Francisco, has addressed the following circular letter to Pacific Coast physicians whose practice is confined to the nose, throat, and ear, with a view of forming an association:

Sir: I have spoken to a number of physicians of San Francisco—whose practice relates to diseases of the nose, throat, and ear—concerning the practicability of forming an association of physicians residing on the Pacific Slope, to include all the States west of the Rocky Mountains. The association to be composed of reputable regular physicians, who pay considerable attention to the diseases above mentioned. The physicians spoken to were favorably impressed with the idea. The value of such an association cannot be easily overestimated in disseminating the latest information gained by observation regarding the etiology, pathology, and treatment of the diseases of these organs. I would be pleased to know whether you would be able to attend and assist in the foundation of such an organization. Also, please send me the names and addresses of such physicians whom you are sure are reputable. You can see the importance of great care on this point, and I have written to those only who are fully endorsed. I have thought that it would be well to have the first meeting of this association held at the same time and place as that of the Medical Society of the State of California, namely, at San Francisco, April 19, 1892. All coming to the California Society can return on reduced rates, as the accompanying circular states. Please let me hear from you at your earliest convenience.

Yours, etc., THOS. F. RUMBOLD.

It is not stated whether oculists are included in the scope of the proposed society, though the majority of the oculists also attend to diseases of the ear, throat, and nose. We do not know of any physician on this coast who confines his practice exclusively to opthalmology, and we believe there is but one laryngologist. A healthy local society might be formed, but anything more ambitious is hardly feasible.

Sulphuring Dried Fruits.

Prof. E. W. Hilgard, of the University of California, in a recent publication (Bulletin No 96) again directs attention to the exceedingly injurious process of sulphuring dried fruits that is generally adopted throughout the State. The freshly cut fruit is exposed to the fumes of burning sulphur generating sulphurous acid gas for the purpose of bleaching it and producing a uniform light shade. This color is certainly more attractive than the nondescript dirty brown possessed by the natural dried fruit, and it has taken the public fancy by catching the eye so that the better article is unsalable. Prof. Hilgard very properly says that a process using such a powerful agent as sulphurous acid must be harmful to any article of dietary. It is quite certain that the flavor has deteriorated, and this is especially true of the thinner-sliced fruits, as apples and pears, in which the flavor has been practically destroyed. Another and most undesirable feature is that this process permits inferior grades, and even partially damaged fruit, to be apparently brought up to the highest standard. Prof. Hilgard expresses the hope of finding an unobjectionable substitute for sulphurous acid gas in the bisulphite of soda. This he proposes to use in solution of a definite strength in which the fruit can be immersed, thus obviating the uncertainty where exposure to the gas is employed, as well as the further element of danger from unskilled or negligent workmen when "sulphuring." He is now experimenting on this subject, and we hope to publish his results at some future date. The commercial side of this question must not be overlooked, when we remember that sulphuring fruits has been generally prohibited by legal enactment in Europe. While on this subject we notice that the *Medical Press and Circular* alludes to "the presence of arsenic in American imported apples" as one of public importance. The arsenic is said to be applied to the fruit by syringing, for the purpose of preserving it from mould and rot, while it may also reach it indirectly through the use of sprays in destroying the pests that infest so many orchards. Our contemporary adds that careful examination by a competent authority has shown that a certain proportion of arsenic has been absorbed, or left behind as a surface coating. We believe that this latter danger is more imaginary than real, while the sulphuring process is certainly and obviously harmful. The principle point in the whole matter is that our fruit industry, now only in its infancy, should be guarded, by employing only the best methods, against assaults of this character. California must look abroad for a market, and to establish a reputation is the first step.

An Unfortunate Case of Fracture of the Skull.

On March 2, 1892, a teamster, named Hector Donnelly, was injured by being struck on the head by falling coal. A friend procured a buggy and took him to the San Francisco Receiving Hospital for treatment. Here his wound was examined, without anything serious being discovered, the injury treated as a simple scalp wound, and the man discharged. Donnelly, according to the statements of his friend, was able to walk into the Hospital, was perfectly conscious while being dressed, and when discharged parted from him outside the Hospital door, saying that he thought he would rather walk home than ride. It is customary at the Receiving Hospital to direct all patients needing after-treatment, to apply at the City and County Hospital, provided they are unable to procure private attendance. Three days later, on the morning of March 5th, patient was admitted to this Hospital. He remained only a few hours, and then, at his own request and on the understanding that he intended to enter St. Mary's Hospital, the man was discharged. Before evening, however, he returned with a note from Dr. J. M. Williamson, stating that the bearer was suffering from a fracture of the skull, and requesting readmittance. He was placed in one of the wards, but no serious symptoms were noticed until the 7th. Paralysis and other evidences of brain trouble now appearing, an operation was determined upon, and carried out on the following day. On enlarging the wound a depression was found as large as a quarter dollar. The depressed fragments were elevated and removed. Notwithstanding the operation, the patient gradually grew worse and died March 10th. At the autopsy the only interesting development was that the bony plates of the skull were extremely thin. Aside from the foregoing facts, there are one or two features which render the case somewhat unfortunate. At the Receiving Hospital there are four surgeons who, in turn, are on duty at regular hours. The Hospital Steward prepares the dressings, and keeps in a register a record of all cases treated, together with the name of the surgeon in attendance. In the books, opposite Donnelly's name, the diagnosis is "lacerated wound of the scalp." The Steward afterwards, on hearing that the man was being treated at the City and County Hospital for fracture of the skull, and with the knowledge of the surgeon who was credited with the case, inserted under diagnosis, "and probable fracture of the skull." The surgeon credited with the case states positively that he was not present at the time, but had stepped out for a few minutes, in order to witness an autopsy in the neighboring morgue. On the other hand the Steward, who made the entries, could not swear that the particular surgeon mentioned was present, and at the same time denies that he took the responsibility of dressing the case himself. All the other surgeons prove alibis, and were not on duty. The case then narrows itself to a question of veracity between the Steward and the surgeon on duty at the time. At the inquest on the case the finding of the Coroner's jury was as follows: "We, the jury, find that Hector Donnelly, aged 44 years, a native of Ireland, and a teamster by occupation, came to his death on March 10, 1892, from a fracture of the skull; and we further find that he was struck on the head with a lump of coal, which caused his death; and we further find that the owners of the coal, Dunsmuir & Son, should be held responsible for the accident; also, that Donnelly did not receive proper care and attention at the City Receiving Hospital." The unfortunate aspect of the case is that the fracture was not recognized at the Receiving Hospital, though it is of course obvious that, even after a fairly careful examination, it might have escaped detection. Regarding the responsibility attaching to the parties concerned, it is very evident that the surgeon would have no object in denying that he had seen the case, whilst the Steward would naturally prefer to disclaim having taken a responsibility that he is expressly forbidden to assume.

SOCIETY PROCEEDINGS.

SACRAMENTO SOCIETY FOR MEDICAL IMPROVEMENT.

Regular Meeting, February 16, 1892.

The President, J. H. Parkinson, in the Chair.

Fibroid Tumors of the Uterus.—Dr. J. R. Laine exhibited a uterus with a number of fibroid tumors attached, which he had removed from a colored woman at the County Hospital. In tying the pedicle a small portion of the bladder was, unfortunately, included in the ligature. This had sloughed, and the extravasation of urine was followed by a general peritonitis, ending fatally.

Dr. T. W. Huntington exhibited a patient, in whom the hip-joint had been partially excised with Volkmann's sharp spoon (Medical Times, vol. vi, p. 62). The case had made a good recovery. Patient was now wearing a Thomas' splint, that portion below the knee having been removed, and the indications were that recovery would be complete, with good use of the limb. A case in which the Thiersch method of skin-grafting had been employed, was also shown. The anterior surface of the knee-joint, and of the limb for some distance above, had been the seat of extensive ulceration, the result of a severe scald. The granulating surface had been carefully dissected off under strict antiseptic precautions, previous to the application of the strips of skin. The surface, which had been quite extensive, was now completely covered. In this operation everything depends on careful preparation and strict attention to details.

Dr. D. Shoemaker exhibited an appendix, removed *post-mortem*, in which a large quantity of fluid had become encysted. No symptoms of this condition had been apparent during life (to be published).

Dr. G. L. Simmons said this case brought up the question, that had already been discussed, whether these closed cavities contained mucus or serum. If the appendix was not patulous, then the contained fluid must be serous in character. He did not know of a cavity in the body not communicating with the air, that secreted mucus. The main point of interest in this case was, that the condition had not produced any symptoms during life that would indicate its existence.

Dr. W. F. Wiard suggested that the condition found might have been congenital, which would account for the character of the fluid.

Dr. C. E. Fowler reported "A Case of Poisoning from Illuminating Gas—Death 32 Hours after Inhalation." (Medical Times, vol. vi, p. 117.)

Dr. W. H. Baldwin said that from his experience the use of stimulants was contraindicated in these cases as tending to increase the already existing cerebral congestion.

SAN FRANCISCO COUNTY MEDICAL SOCIETY.

Regular Meeting, February 9, 1892.

The President, D. W. Montgomery, M. D., in the Chair.

Dr. L. Bazet exhibited a kidney containing calculi, that had been removed *post-mortem* from a case presenting the following history: The patient, aged 39 years, a native of France, and an engineer by occupation, complained of urinary trouble. He was very emaciated, and also suffered from a bad cough. On November 28, 1891, he was admitted to the Polyclinic ward of the City and County Hospital. No history of hereditary disease could be traced. Twenty-two years ago he had contracted urethritis, and had since had several attacks. In 1888 he had been admitted to one of the Paris hospitals, under the care of Prof. Guyon, for cystitis, and when discharged was advised to seek a milder climate. On landing in New York he was taken sick, but regained his health after several weeks of treatment. In the latter part of the same year he came to California, and enjoyed relatively good health during 1890, when he began to complain of night sweats and loss of weight. On admission to hospital his condition was as follows: Very frequent, difficult and painful micturition, with straining. Pain continuous, localized above the pubes, radiating toward the right lumbar region and right testicle. Urine turbid and muco-purulent. Right lung, amphoric respiration at the apex; left lung, bronchial breathing and very extensive area of congestion. Right vocal cord ulcerated. Microscopical examination of sputa showed considerable tubercle bacilli. The digestive organs were normal, the skin dry and hectic fever was present. Cystotomy was proposed as a palliative measure, to give rest to the bladder. Death occurred 14 days after the operation, from the pulmonary complication. Dr. D. W. Montgomery who has examined the kidney, made the following report: "I made sections of a block cut out of this kidney, and including both the cortical and medullary portions. The lesions were all those of an intense recent reflammation. There was much inflammatory infiltration and in some places this infiltration was very dense, and looked as if it was on the point of causing disintegration and liquefaction, and consequent abscess formation. It was a case of surgical kidney, in fact. The point of greatest interest was that a stone of such a size could be such a long time in the pelvis without giving rise to more marked chronic changes in the parenchyma of that organ."

Dr. G. F. Shiels said that the diagnosis of renal calculi was very difficult, as the symptoms seem to indicate that the trouble is in the bladder. In all cases a careful examination of the urine should be made.

Dr. Emma S. Merritt said, from the fact that there was a stone in the bladder, that kidney trouble might have been suspected, and asked what were the symptoms that led to the removal?

Dr. A. Abrams had experienced considerable difficulty in the diagnosis of pyelo-nephritis. The subjective symptomatology was always subservient to the objective examination, which included a quantitative estimation of the albumin and urea in the urine, and the microscopical examination of the urinary sediment. Of late he had employed palpation of the kidneys as a valuable adjunct in diagnosis. At first he experienced some trouble with this method, but continued practice had removed many difficulties. Palpation of the normal kidney is negative, but when diseased, its mobility, consistency and reaction to pressure, may be made out. He recalled one case which, in common with other physicians, he had treated for cystitis, but without any improvement. The patient then went to Heidelberg and consulted Czerny, who diagnosed a pyelo-nephritis. The kidney was removed, and although the operation was a success, the patient died a few days after. At the autopsy it was found that the unfortunate subject had had only one kidney and that was the one that had been removed. He believed the results of treatment in a given case would aid in a diagnosis. A case of presumable cystitis, which did not yield to repeated irrigation of the bladder, was almost positive evidence of a lesion higher up. He wished to show a specimen of calculos pyelo nephritis, from which the patient had suffered for many years. The subject had only bladder symptoms, and the affection was diagnosed by other physicians as one of cystitis. Treatment directed toward the bladder did no good. At the autopsy the bladder was absolutely normal. The right kidney was entirely destroyed by suppurative inflammation, and the left kidney, which was hypertrophied, contained six large calculi. He recalled *post-mortem* examinations where calculi were found in the kidneys, but which, during life, gave no evidence of their presence.

Dr. Charlotte B. Brown mentioned an interesting case, in which the patient had had an attack of nephritic colic two years before being seen. Blood was found in the first specimen, with marked suppression of the urine. The left kidney was affected, and was easily seen, as it was as large as a man's head. The kidney finally became loosened from its attachments; the patient was kept very quiet, and in a few weeks made a perfect recovery. No doubt there was a stone in the kidney.

Dr. W. F. McNutt said that the specimen shown by Dr. Bazet was extremely rare and interesting, as there was no history of renal colic, yet there was a large stone in the ureter. No doubt the stone grew in the ureter, as it was so large that it could not have passed to the position that it occupied. The urine must have filtered around the stone. Another curious circumstance was the fact that there was no history of rheumatism, neuralgia or gout. The relation between rheumatism, gout and stone is very apparent in some families.

Dr. M. Krotoszyner said that pyelo-nephritis can be produced artificially by treatment. A gentleman had gonorrhea 30 years ago in Europe; was treated by medicated bougies; had epididymitis and cystitis; pus was the only abnormal element in the urine; the diagnosis was pyelo-nephritis. The inflammation was no doubt carried from the urethra by the treatment.

Dr. G. W. Daywalt said that Dr. Sim, of Memphis, called attention to the fact that those people that consume large quantities of asparagus and onions are often affected, and he has seen great improvement and very satisfactory results when these vegetables had been discarded from the diet.

The President said it was surprising that the stone found had not done more injury, as the inflammatory conditions were acute; in fact all of the lesions seemed of an acute character, showing that the irritation was of recent date, which would have resulted in abscess of the kidney in a very short time, as liquefaction was going on very rapidly. The stone in the ureter might have gone there when small and grown afterwards. He did not suppose there had been any renal colic, or the man would have complained. The urine must have filtered past the stone.

Dr. Bazet, in replying, said that the patient never complained of any pain in the lumbar region. He was treated for cystitis.

Dr. H. Kreutzmann exhibited a specimen obtained from a patient on the previous day. The subject was 35 years of age, and had borne one child 14 years ago. There had been no miscarriages. For several years past she has suffered from pain in the right side of the abdomen, and these pains were getting worse at each menstrual period. An examination, under chloroform, showed that the uterus and left appendages were normal. On the left side a small mass, the size of a pigeon's egg, could be felt, but the tube and ovary could not be made out distinctly. The diagnosis between pyosalpynx and a small intraligamentous cyst was uncertain. An operation was performed, and the specimen exhibited was removed. It was found to be a hydrosalpynx, with three colloid cysts, the size of hazel nuts, attached to the outside of the tube. The ovary contained one colloid cyst, as large as a walnut, and a few minor cysts. All were transparent, and of a yellow or reddish color.

Dr. McNutt said: The specimen is a very fine one, and Dr. Kreutzmann did extremely well to diagnose such a small tumor. In the hands of most people the case would have gone on for a long time, until the tumor would have been much larger.

Dr. Merritt asked what were the symptoms that led to the removal of the tumor?

Dr. Kreutzmann, in replying, said he did not think that it was such a difficult matter, as the tumor, when in the abdomen, appeared larger, and the only manner of obtaining relief was its removal. When there was any doubt in diagnosis, he put the patient under chloroform, when he found it much easier.

CALIFORNIA ACADEMY OF MEDICINE.

Regular Meeting, January 16, 1892.

The President, **Luke Robinson, M. D.**, in the Chair.

Dr. J. F. Morse said he desired to report a case that had some bearing on the discussion at the last meeting in regard to trephining. Patient, a male, aged 54, was admitted to the German Hospital December 23, 1891. He had received a fall many years before, and had recently been troubled with epileptic fits. Had not been excessive in his habits, nor had he ever had an attack of syphilis. December 26th, the skull was trephined over an area of depression and a piece about 1 by 2 inches removed. There was no depression of the inner table, the dura was separated from the brain, and the latter found to be in good condition.

The wound was dressed, and healed by first intention; there was no suppuration, or elevation of temperature. Since the operation there had been one or two slight attacks. He reported this case more to show that it was not so extremely dangerous to open the skull as was once supposed, providing it was done according to the rules of modern surgery.

DR. M. HILDEBRAND read a paper "On Hypodermoklysis" (to be published).

DR. G. F. SHIELS said that if what the speaker had stated about the use of hypodermoklysis as a means of restoring those suffering from chloroform poisoning was true, he had indeed brought a very valuable subject before the profession.

DR. H. KREUTZMANN said he had only one personal experience with hypodermoklysis. This happened about 10 years ago in conjunction with Dr. Hund. They made an injection of a saline solution, and were astonished how easily and how much of the solution could be introduced under the skin. They had been able to get a great amount absorbed by massage. He had read of its use six or eight times. In one case, where a physician had performed ovariotomy, there was considerable hemorrhage, and a good deal of blood was lost. A saline solution was prepared and injected under the skin, and the patient was saved. He had great faith in it, and had put a special needle in his surgical case in order to use it should the occasion arise. It was a perfectly harmless and safe operation. The injection in the case just referred to, was made in the back at two different points, in the upper region of the scapulæ, and about a litre was injected.

DR. J. CALLANDREAU had no personal experience with it, but had read of Dr. Mollrine, in Spain, having used it. He had termed it a washing out of the system, and had used it quite extensively during the cholera that occurred there in 1884–5, and has continued to employ it since.

DR. F. W. D'EVELYN said that the manner in which hypodermoklysis acted was by its mechanical effect; it increased the volume of blood, and stimulated the failing heart.

DR. W. WATT KERR said about two years ago he had occasion to use hypodermoklysis in a case of hemorrhage from typhoid fever. It was used two or three times and the patient got better, but another hemorrhage soon occurred, and direct transfusion of blood was performed, and the patient was tided over. The advantage of hypodermoklysis is that it is more readily performed than direct transfusion of blood, and in enteric fever it would be better than inserting the solution into the rectum, as we do not wish to distend the intestine, and there is better absorption from the tissues than by the bowel. He did not know the effect of hypodermoklysis in cases of snake-bite; it may act by stimulating the heart by its increased quantity, but hardly thought that it could wash the poison out of the system. Another physiological point is that it does not raise the blood pressure. This has also been noticed in the experiments into the cause of dropsy in Bright's disease. He thought hypodermoklysis a good thing, free from danger, and so simple that one could trust a nurse to do it, whereas transfusion of blood could not be performed with such safety or facility. In cases where there has been a good deal of blood lost, as in *post-partum* hemorrhage, or hemorrhages in typhoid, it could be used with advantage.

DR. JAS. SIMPSON said that Stevens, of New York, a long time ago—before the hypodermic syringe was known—introduced an alkaline solution into the system. It was also used in 1853–4, but not with success. The speaker thought that in depletion, as in cholera, hemorrhage, etc., hypodermoklysis would keep the heart sustained and tide the patient over, but he couldn't see why introducing the fluid hypodermically was any better than by Stevens' method, which was called by him transfusion, but since the first experiments the results have not been so favorable. He thought the fluid tended to arrest the coagulation of the blood in the venous side of the heart, and kept it working. We can only realize the benefits of hypodermoklysis by experiment and time. He inquired the amount of fluid injected and the time necessary to perform the operation.

DR. W. S. THORNE said that Stevens' method was simply transfusion. In 1853 there was quite an epidemic of cholera, and this method of Stevens' was used, but gradually abandoned. There were several theories regarding its action; one was that it kept the heart up, and the hypodermic injections act much the same way. What this hypodermoklysis will amount to, we can only tell—as Dr. Simpson said—by time. He asked Dr. Hildebrand what was the strength of the solution used. He thought there was always more or less of anesthesia from the previous loss of blood, and wished to know if the litre was injected in one place.

DR. MORSE said that from a surgeon's standpoint hypodermoklysis is a good thing, if it affords the relief that is claimed for it, and it should be recommended especially for its simplicity and harmlessness. He could not agree with Dr. Simpson that there was no difference between this and Dr. Stevens' method. All methods of transfusion are bad, the great danger being the admission of air into the veins. One cannot positively guard against it, so it was abandoned. By hypodermoklysis the fluid is thrown into the lymph spaces, and is quickly transfused throughout the whole body, even more rapidly than it is in intravenous injections. He would go in the future prepared, and, should he have occasion, would use it, as there could be no harm, and possibly much good result from its use.

DR. SIMPSON said he had seen transfusion performed, and air was supposed to be shut out, but was not. We cannot keep air from entering some way or other. This method of injecting hypodermically was simply an improvement.

DR. I. RIVAS said that a few months ago he was called to see a woman who was nearly dead from hemorrhage. He injected a syringe full of plain water into the rectum, and in a short time she opened her eyes and was saved. He wished to know what produced the good effect—the liquid or the small amount of solids? He believed it was the liquid, and inquired whether, in an emergency, plain water would not do just as well.

DR. O. G. MILLER said that only eight or nine ounces can be introduced by transfusion, but by hypodermoklysis we can use a litre or so.

DR. KERR said that he believed with Dr. D'Evelyn and Dr. Simpson that hypodermoklysis acted mechanically, filling the vessels and giving the heart more to contract on. In reply to Dr. Robinson, he said that of course the blood pressure would be increased if it was used on a person in a state of collapse, but it would not be increased in the normal animal.

DR. HILDEBRAND, in replying, said the physiological solution was used, the proper strength being 07:1000; if too strong, say 01:100, it seemed to have some effect on the hemoglobin. From 1 to 2 litres was used. It took about two hours to reduce the tumor made by the fluid; there was no local reaction if all the details were carried out antiseptically. There was no pain from the tension. It had been suggested that the main tube connected with the reservoir be divided into four tubes, and a trocar placed in each, so that four injections could be given simultaneously.

DR. KERR and DR. D. W. MONTGOMERY reported a peculiar case that had passed from their hands into that of another physician (Dr. Mussey). The diagnosis could not be made out with certainty, as it resembled a case of Bright's disease, and then again a neurosis, but the exact condition was not determined, as no autopsy could be made.

CALIFORNIA NORTHERN DISTRICT MEDICAL SOCIETY.

Regular Meeting held at Marysville March 15, 1892.

The regular spring meeting of the California Northern District Medical Society was held in the Court-house at Marysville, March 15, 1892, the Society being called to order by the President, DAVID POWELL, of Marysville.

La Grippe.—The recent epidemic of la grippe was discussed at some length by the Society.

DR. J. R. TODD, of Gridley, had met with a number of cases of otitis media following influenza.

DR. C. E. STONE, of Marysville, reported several cases in which tincture of iron had been very beneficial.

DR. F. W. BENJAMIN, of Oroville, had had very satisfactory results from a combination of antikamnia, salol and quinine.

Obstetrics.—At the afternoon session DR. C. E. STONE, of Marysville, read a paper on "Obstetrics," discussing the process of labor from its commencement until its termination. He alluded to the use of injections into the os uteri of morphine and atropine by the hypodermic syringe in cases of rigidity, which he had found very successful on several occasions.

Dr. O. Stansbury, of Chico, had employed chloral hydrate by rectal injection in these cases with gratifying results.

Antisepsis.—At the evening session Dr. J. R. Todd, of Gridley, read a paper on this subject, and alluded to the advantages of peroxide of hydrogen (Marchand's) in diphtheria, in which disease he had used it with gratifying success.

Dr. J. R. Rodley, of Chico, had found peroxide of hydrogen very useful in cases of otitis media, and spoke of its value when administered internally in phthisis.

At the various sessions, the following were elected members of the Society: W. E. Briggs, T. Dobbins, T. W. Horton, J. H. Parkinson, T. W. Serviss.

The Society adjourned to meet at Chico on the third Tuesday of October. The visitors were subsequently entertained at a banquet at the new Western Hotel by the local profession.

CORRESPONDENCE.

Treatment of Endometritis.

Sir: In the Occidental Medical Times for February, 1892, we observe quoted, from *The Lancet*, in your Gynecological Summary, a paper by Dr. Cory of London on "The Treatment of Endometritis," in which the author states "that though it (endometritis) is one of the most common diseases to which women are subject; it is also one of the most easily cured." This statement, as well as the method by which Dr. Cory effects a result so desirable, were, however, controverted in a succeeding number of the same journal by us. As our views on this subject, in reply to Dr. Cory, have apparently escaped your attention, and as the questions at issue are of much practical importance, we trust that you will kindly afford space for the following brief recapitulation of some of the objections that may be raised to the doctrines proprounded by Dr. Cory. In the first place, the assertion that this disease is one most easily cured is entirely at variance with our clinical experience, which is probably quite as extensive as that of Dr. Cory; and, in the second place, we think that the plan of treatment on which he relies can hardly be regarded as either novel or generally serviceable, and from a practical point of view is apparently somewhat below the level of modern gynecological teaching, at least as far as that of the Dublin school is concerned. The antagonistic mixture suggested by Dr. Cory in the way of medical treatment, viz: "twenty grains of bicarbonate of soda and twelve grains of citric acid in an ounce and a half of water," given three times a day, would, we consider, be probably quite as effective if applied locally; and might also have a fair claim to doing no harm either to the endometritis or to the patient. The local application of Churchill's tincture, or iodized phenol, by means of Playfair's probe as now once more recommended, was many years ago tried by ourselves and other Dublin gynecologists, who have long since abandoned its general employment in such cases. Nor can we now understand the benefit of returning to such treatment or relying on its reported curative action, at least until the cervical canal has been previously dilated, the viscid mucous secretion removed therefrom, and the diseased endometrium thoroughly curetted (points of vital importance, not even alluded to in Dr. Cory's paper), and after which, but not before, the application he again recommends may possibly be of service in the treatment of chronic endometritis.

We are, etc.

Thos. More Madden,
Alexander Duke.

REVIEWS AND NOTICES.

Practical Intestinal Surgery. By F. B. Robinson, B. S., M. D., Professor of Anatomy and Clinical Surgery Toledo Medical College. Physicians' Leisure Library. Detroit: Geo. S. Davis. Cloth, 50 cents; paper 25 cents.

Any contribution to abdominal surgery, based upon experimental work, will be received and read by the profession with much interest. In two small volumes the author has given a concise account of a line of experiments that are of unusual value. His chief aim has been to follow the lines drawn by Senn, Abbé and other workers, and to verify their conclusions. In doing this he has adopted various modifications in matters of *technique* and general detail, many of which impress us as of decided advantage. His demonstration of the use of bone rawhide and rubber plates, and the catgut ring of Abbé, is clear, concise and readily understood. In a word, the work of Dr. Robinson is more than usually deserving.

TREATISE ON GYNECOLOGY, MEDICAL AND SURGICAL. By S. Pozzi, M. D., Professor Agregé á la Faculté Médicine; Chirurgeon de l'Hospital Lourcine-Pascal, Paris; Honorary Fellow of the American Gynecological Society. Translated from the French, under the supervision of, and with additions by, Brooks H. Wells, M. D., Lecturer on Gynecology at the New York Polyclinic; Fellow of the New York Obstetrical Society, etc. Volume 1, with 305 wood engravings and 6 full page plates, in color. New York: William Wood & Co. pp. 582.

The past decade has witnessed a revolution not only in the pathology, but also in the practice of gynecology. Not until the appearance of Pozzi's monumental work, however, were the surviving principles of the distant and of the recent past harmoniously blended into the living present. Pozzi approached his work admirably equipped—linguist, scholar, clinician—and has produced a treatise that fully merits the encomium of its American editor. It *is* "undoubtedly the best work on gynecology which has appeared for many years, in any language." The volume before us consists of 581 octavo pages, and treats of antisepsis, anesthesia, control of hemorrhage, closure of wounds, drains and tampons, examination of the patient, metritis, fibroma, carcinoma, displacements, deformities of the cervix and disorders of menstruation. Within the imperative limits of this review it would be impossible to consider the details of so voluminous a work. Suffice it to say, that as a whole it represents the present status of gynecology far better than any other work yet extant. The editor, by judicious notes; the translator, by his idiomatic English, and the publisher, by clear and legible type, copious illustration and artistic binding have all contributed their share to the reader's delight.

DIAGNOSIS AND TREATMENT OF HEMORRHOIDS AND OTHER NON-MALIGNANT RECTAL DISEASES. By W. P. Agnew, M. D. Second edition. San Francisco: R. R. Patterson. pp. viii, 140. Price, cloth, $1.50.

This little monograph is a dissertation upon a subject that has received a fair amount of attention on the part of every writer upon general surgery for centuries. Furthermore a large number of reputable specialists have from time to time elaborated their views *in extenso*. Hence it would seem that the field had been well nigh exhausted. Certainly it can hardly be expected that anything wholly original or specially unique, either in the pathology of these diseases or *technique* of treatment, will be developed at the present time. In the volume before us the author has embodied various modifications of established methods, and has produced a hand-book which may be commended as fairly reliable and authoritative.

MEDICAL NEWS.

LICENTIATES OF THE BOARD OF EXAMINERS.

At a meeting of the Board of Examiners, held March 1, 1892, the following physicians having complied with the law and the regulations of this Board, were unanimously granted certificates to practise medicine and surgery in this State:

Seth Martin Benepe, Sebastopol; Bellevue Hosp. Med. Coll., N. Y., March 1,'66.
Eli F. Brown, East Riverside; Med. Coll. of Indiana, Feb. 28,'79.
Clark James Burnham, San Francisco; Med. Dept. Univ. California, Nov. 10,'91.
James Booth Clarkson, San Francisco; Royal Coll. Phys. and Surg., Edinburgh, Scotland, April 8,'81.
Irvin N. Frasse, Pasadena; Med. Dept. Univ. Pennsylvania, May 1,'90.
Richmond E. Gibson, Paskenta; Univ. of Buffalo, N. Y., March 25,'90.
Jefferson G. Hart, Pomona; Med. Dept. Iowa State Univ., '55; Med. Coll. St. Louis, Mo., '63.
Luther H. Keys, Maxwell; Charity Hosp. Med. Coll., Cleveland, Ohio, Feb. 24,'70.
Robert Joseph McGettigan, San Jose; Cooper Med. Coll. Cal., Dec. 4'91.

Louis P. Oveido, San Francisco; Med. Dept. Univ. California, Nov. 10,'91.
Blanche O. Sterrett (*née* Burroughs), San Francisco; Woman's Hosp. Med. Coll., Ill., Feb. 27,'77.
James M. Wellwood, San Francisco; Med. Dept. Tulane Univ., La., March 30,'87.
William H. Wilmot, Highland; Med. Dept. Univ. of Iowa, Feb. 15,'58.

CHAS. C. WADSWORTH, Secretary.

Official List of Changes in the Stations and Duties of Officers serving in the Medical Department of the U. S. Army (Division of the Pacific), from February 20, 1892, to March 20, 1892.

The leave of absence for seven days granted First Lieut. Charles Wilcox, Assistant Surgeon, by Orders No. 8. Fort Gaston, Cal., Feb. 16, 1892, is hereby extended seven days. Par. 1, S. O. 20, Dept. of California, Feb. 23, 1892.

Capt. William R. Hall, Assistant Surgeon, will report to Capt. William E. Dougherty, 1st Infantry, for duty with his command, and he will make requisition, if necessary, for medical supplies, in addition to what may be provided from the post of Angel Island. Par. 2, S. O. 23, Dept. of California, Mar. 2, 1892.

Capt. Leonard Wood, Assistant Surgeon, is hereby relieved from the duty of examining recruits at the rendezvous in this city. Par. 5, S. O. 27, Dept. of California, Mar. 10, 1892.

Lieut.-Col. Francis L. Town, Surgeon, while on duty at these headquarters in charge of the office of the Medical Director, will, in addition to said duty, examine recruits at the rendezvous in this city. Par. 5, S. O. 27, Dept. of California, Mar. 10, 1892.

Acting Assistant Surgeon S. T. Weirick, now at Fort Apache, A. T., is assigned to duty at that post, and will report accordingly. Par. 1, S. O. 34, Dept. of Arizona, March 14, 1892.

Leave of absence for seven days, granted Assistant Surgeon R. W. Johnson, in Orders No. 60, c. s., Fort Bayard, N. M., is extended fourteen days. Par. 1, S. O. 35, Dept. of Arizona, Mar. 16, 1892.

First Lieut. Philip G. Wales, Assistant Surgeon, is relieved from further duty at Fort Apache, Arizona, and will report in person to the commanding officer, Fort Bowie, A. T., for duty at that station, relieving First Lieut. William N. Luter, Assistant Surgeon.

By direction of the President, the retirement from active service this date, by operation of law, of Col. Basil Norris, Surgeon, is announced. War Dept., Washington, March 9, 1892.

Capt. Marcus E. Taylor, Assistant Surgeon, granted leave of absence for six months, on Surgeon's certificate of disability.

First Lieut. William N. Suter, Assistant Surgeon, granted leave of absence for four months from March 22, 1892.

ITEMS.

Dr. Geo. H. Powers has removed his office from 215 Geary street to 533 Sutter street, San Francisco. DR. W. E. HOPKINS (late Surgeon U. S. A.) is now associated with Dr. Powers, in treatment of diseases of eye, ear, throat and nose.

Dr. L. D. McIntosh, Vice-President of the McIntosh Battery and Optical Co. of Chicago, died very suddenly on Tuesday, March 1st, at DeFuniak Springs, Florida, where he had gone to lecture before the Florida Chatauqua, on microscopy and kindred subjects.

The F. A. Davis Company, of Philadelphia, was incorporated on November 19, 1891, under the laws of the State of Pennsylvania. The business of F. A. Davis was purchased by the company, and Mr. Davis was made President. "The Annual of the Universal Medical Sciences," as well as all other books and periodicals, already published and in preparation, are the property of the company. The active management remains entirely in the same hands as before.

Jefferson Medical College.—The Board of Trustees and the Faculty of Jefferson Medical College, of Philadelphia, have just completed the purchase of two large lots on Broad street, giving them a frontage of about 300 feet and a depth of 150 feet, upon which they will at once proceed to erect a handsome hospital, lecture hall and laboratory building. The estimated cost of the buildings is $500,000. The hospital will be built not only as a suitable building in which to care for the sick and injured, but also will be provided with a large amphitheatre for clinical lectures. The new site is even more favorably situated in regard to the centre of the city than the old one at Tenth and Sansom streets. The move has been made necessary by the increased attendance, and because the Faculty desire to keep the school and hospital in the foremost rank of medical education in this country. The buildings will be ready for occupancy in the session of 1893-4.

U. S. Marine-Hospital Service.—A board of officers will be convened in Washington, May 2, 1892, for the purpose of examining applicants for admission to the grade of Assistant Surgeon in the U. S. Marine-Hospital Service. Candidates must be between 21 and 30 years of age, graduates of a respectable medical college, and must furnish testimonials from responsible persons as to character. The following is the usual order of the examination: (1) Physical; (2) Written; (3) Oral; (4) Clinical. In addition to the physical examination, candidates are required to certify that they believe themselves free from any ailment which would disqualify for service in any climate. Successful candidates will be numbered according to their attainments on examination, and will be commissioned in the same order, as vacancies occur. After four years' service, Assistant Surgeons are entitled to examination for promotion to the grade of Passed Assistant Surgeon. Promotion to the grade of Surgeon is made according to seniority and after due examination, as vacancies occur in that grade. Assistant Surgeons receive $1,600, Passed Assistant Surgeons $1,800, and Surgeons $25,00 a year. When quarters are not provided, commutation at the rate of $30, $40, or $50 a month, according to grade, is allowed. All grades above that of Assistant Surgeon receive longevity pay—ten per cent. in addition to the regular salary for every five years' service, up to forty per cent., after twenty years' service. The tenure of office is permanent. Officers traveling under orders are allowed actual expenses. For further information, or for invitation to appear before the Board of Examiners, address the Supervising Surgeon-General, M. H. S., Washington, D. C.